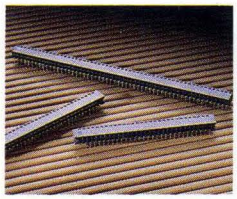
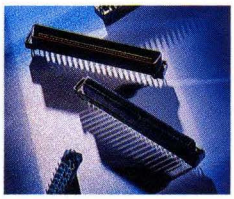
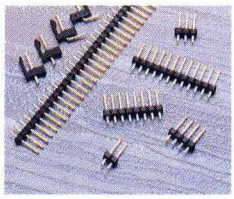
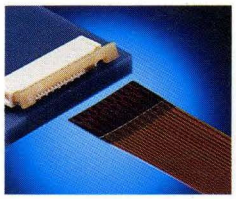
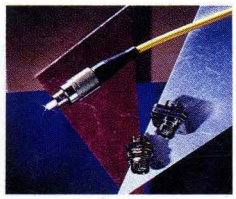
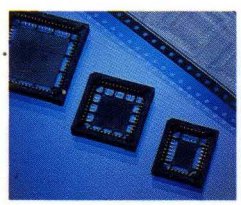
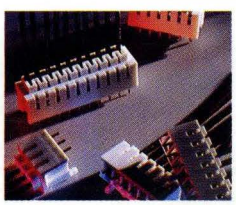
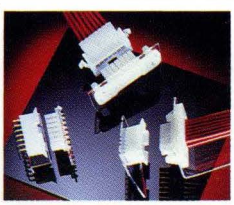
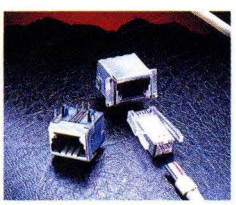
FULL LINE CATALOG


molex

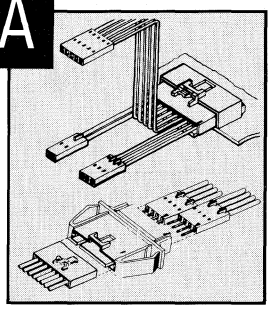







NO. 930

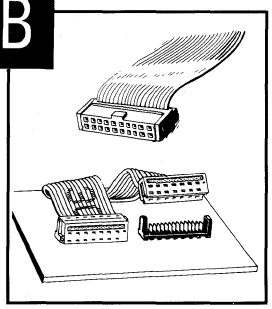
The Molex catalog is divided into alphabetical sections. Illustrations and brief descriptions of our product lines on this page are followed on the opposite page by tabs which will help you quickly find the sections you need.

A



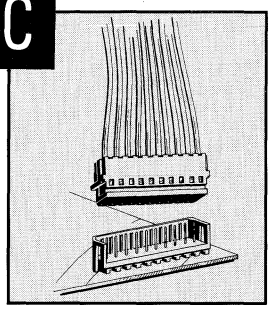
C-Grid™ and SL™, .100" 2,54mm modular wire-to-board and wire-to-wire connections.

B



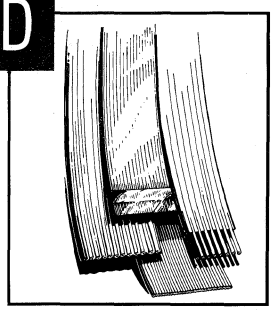
MX 50™, QF50™ and Picoflex™, .050" 1,27mm ribbon cable connectors.

C



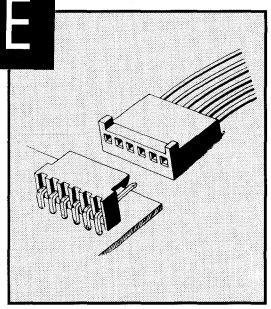
SPOX™ PCB interconnection systems; wire-to-wire and wire-to-board connectors, 2.0mm to 5.08mm centers. Spring box crimp terminals.

D



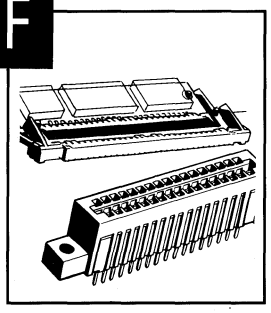
Round conductor-flat ribbon cable; notched or strip-and-retain jumpers; 1.0mm and 1.25mm flat flex cable (FFC) jumpers.

E



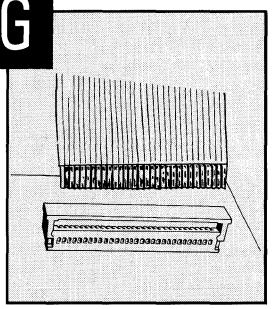
KK® PCB crimp connector systems and components; housings, double cantilever terminals, headers and pins. Also IDT connectors.

F



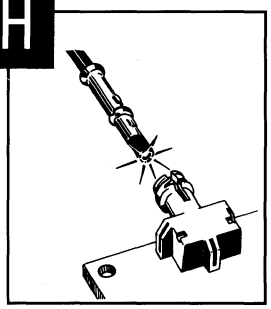
SIMM Sockets and double- and single-sided edge card connectors, housing, terminals, headers and pins.

G



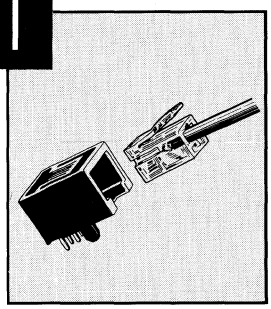
Connectors for membrane switch tails, flat flexible cable, flexible printed circuitry. Also wire trap connectors for ribbon cable.

H



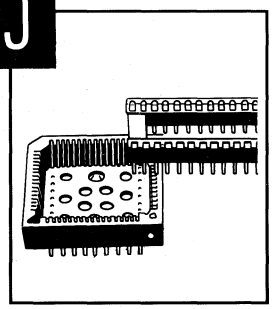
Fiber Optic connectors, ST, ST II, FC/PC, SC, SMA, FDDI and ESCON; bypass switches, field termination tooling, premise wiring systems; fiber optic cable assemblies.

I



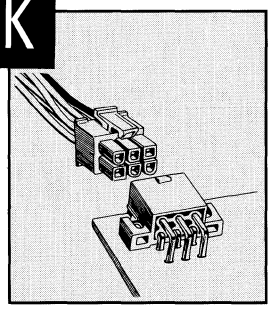
Telecom interconnection components; plugs, jacks, and splices. Also DIN 41612 connectors.

J



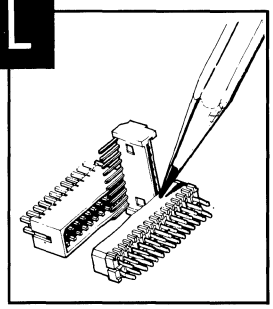
IC Sockets and terminals, PLCCs, and sockets for transducers and transistors.

K



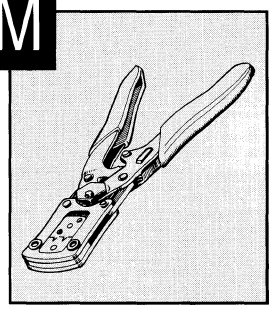
Pin & Socket power connectors, housings and terminals; and miscellaneous special purpose connectors.

L



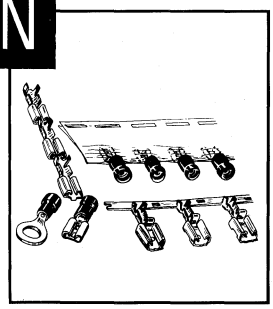
Micro connectors for FFC, board-to-board, wire-to-board, wire-to-wire and FFC/FPC applications; 0,5mm to 2,0mm.

M



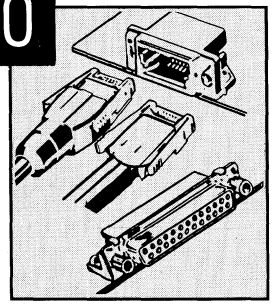
Application (Termination) Tooling; crimp and IDT. Hand tools to fully-automated equipment. Also robotic technology.

N



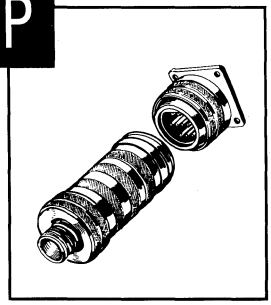
Solderless Terminals, splices, quick connects, cable ties, and associated application tools.

O



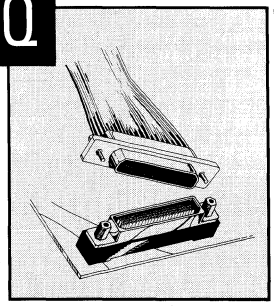
Input/Output Connectors; SEMCONN shielded system, ACCESS.bus, Mini-DIN, D-Sub connectors.

P



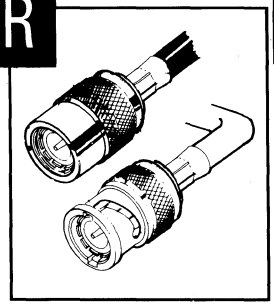
Multipin circular connector shells; unique insert locking system allows mixing of terminal sizes in the same insert.

Q



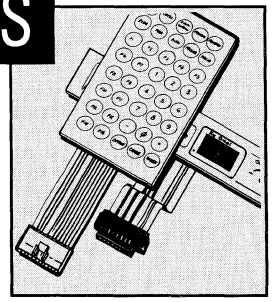
UltiMate® .050" and .025" center pin and socket connector technology qualified to all 27 slash sheets of MIL-C-83513.

R



RF Coaxial Connectors; medium and miniature sizes offered in a variety of plating and termination styles.

S



Control Panels; Wide range of data entry devices from membrane switches to fully integrated displays, including logic. Also pushbutton switches.

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PCB CONNECTORS WITH SPRINGBOX TERMINALS	.079" to .200" 2,0mm to 5,08mm Center Spox™ Wire-To-Board Systems	C
CABLE	Round Conductor-Flat Ribbon Cable Notched and Strip-and-Retain Jumpers 1,0mm and 1,25mm Flat Flexible Cable Jumpers	D
PCB CONNECTORS	Printed Circuit Board Interconnection Products, .098" to .200" 2,5mm to 5,08mm Center KK® Crimp Terminals, Housings, Connectors, Headers, and Insulation Displacement Connectors	E
SIMM SOCKETS & EDGE CONNECTORS	SIMM Sockets for SIP Packages Edge Connectors	F
FFC CONNECTORS	Flat Flexible Circuitry Connectors For Membrane Switch Tails, Planar Cable FFC/FPC	G
FIBER OPTICS	Fiber Optic Connectors, ST, STII, FC/PC, SC, SMA, FDDI and ESCON; Bypass Switches, Field Termination Tooling, Premise Wiring Systems; Fiber Optic Cable Assemblies	H
TELECOM CONNECTORS	Modular Plugs & Jacks DIN 41612 Connectors	I
SOCKETS	Sockets for Transducers, Transistors, PLCCs, SIPs and DIPs, Integrated Circuits	J
PIN AND SOCKET CONNECTORS	Plug & Receptacle, High Current Power Connectors, Special Purpose Components	K
MICRO CONNECTORS	FFC, Board-to-Board, Wire-to-Board and Wire-to-Wire Connectors 0,5mm to 2,0mm	L
APPLICATION TOOLING	Termination Tooling Hand, Semi-Automatic, Fully Automatic Crimp, Insulation Displacement, Robotic Packaging	M
SOLDERLESS TERMINALS	Solderless Terminals, Quick Connects, Splices, Cable Ties, Tooling, European Quick Connects	N
I/O CONNECTORS / D-SUBMINIATURES	For High Speed Data Busing, Terminates Round and Flat Shielded Cables	O
ENVIRONMENTAL CONNECTORS	Rugged Industrial Connectors	P
MICRO/NANO MINIATURE CONNECTORS	.050" Rectangular, S-Series; RT & RQ Series circular; .025" N-Series; JSB & JSS Series Jackscrew. MIL-C-83513 Qualified	Q
RF CO-AXIAL CONNECTORS	BNC, TNC, Twinax, N Style, UHF, Mini-UHF	R
SWITCHES	Membrane Switches, Control Panels and Pushbutton Switches	S

A Worldwide Commitment to Quality in Everything We Do

Molex: A One-Source Supplier

Molex is a Fortune 500 company that has been serving customers since 1938. More than 40,000 quality products are available through a network of direct sales, distribution and manufacturers' representatives. Besides quality products and service, we also have worldwide design, engineering and manufacturing capabilities that we support with 48 manufacturing facilities in 20 countries. Our size and resources allow us to anticipate and meet customer needs through an aggressive new product development program that emphasizes custom design capabilities.

Industries that we serve include automotive, computer & peripheral, business equipment, home appliances, home entertainment, medical electronics, data communications and telecommunications.

Since reducing the total applied costs of using our products is important, we also offer a complete line of semi- and fully-automated application tooling to support our customers' production requirements.

Molex's Worldwide Operating Philosophy: Total Customer Satisfaction

The quality of our products and services is Molex's number one operating priority. It applies to everything we do for our customers. Our goal is to provide better products and services than any of our competitors. To achieve this we are dedicated to continuous improvement of each and every one of our value-added processes.

Preferred Version Products

In a few cases Molex manufactures equivalent products with slightly different features in more than one region of the world. The leadtimes are longer for those versions which are not locally manufactured or stocked.

The wording "Preferred Version in _____ " has been added near the Ordering Information for those products which are only being actively promoted in one or two areas of the world. This is to steer you toward the alternate products which will be listed nearby.

All information contained herein, including illustrations, specifications and dimensions, is believed to be reliable as of the date of publication, but is subject to change without notice. Current sales drawings and specifications are available upon request. Molex makes no claims or warranties as to the application of these products of their suitability or fitness for any particular purpose. Accordingly, it is recommended that each user independently test and evaluate products for their intended use.

Printed in U.S.A.

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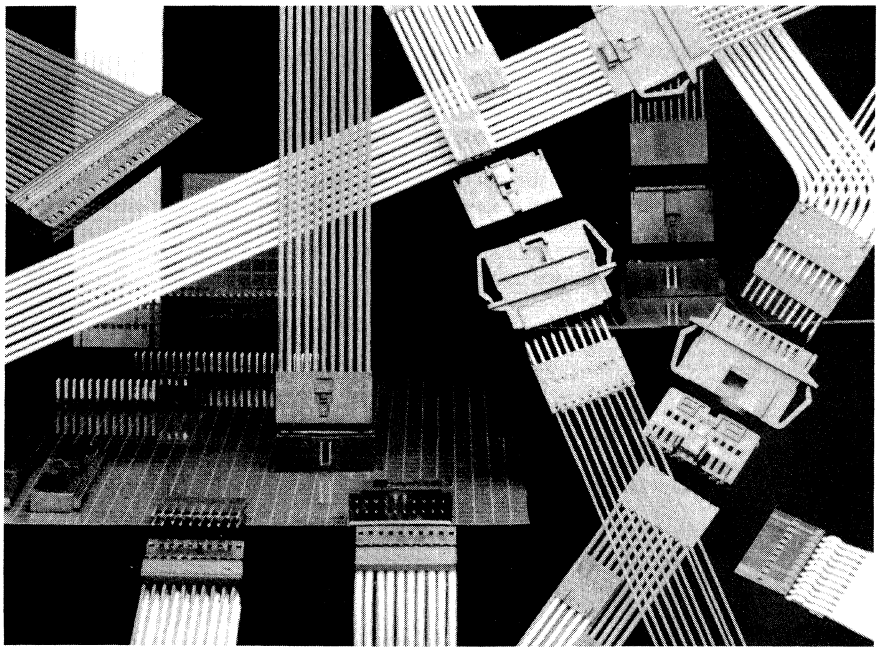
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Discrete Wire Panel Mount 56A-60A

Interim Clips

Single Row 61A

Dual Row 62A

Unshrouded Headers 63A

Straight and Right Angle
Single Row 64A-65A, 81A

Straight and Right Angle
Dual Row 66A-73A, 87A

Shrouded Headers

Straight and Right Angle
Dual Row 74A-80A, 83A

Shunt, Micro Shunt, and Ultra Shunt Header for Micro Shunt 84A-87A

Board-to-Board Connectors 88A

Single Row 81A, 89A-90A

Dual Row 82A, 91A-96A

Surface Mount Header 97A

Surface Mount Connector 98A

C-Grid High Density Connectors

A

Introduction

Molex presents its modular .100" center interconnection products ... **C-Grid™**, our **dual row system for digital circuit boards** and **C-Grid SL™**, our **single row fully stackable wire-to-board and wire-to-wire system.**

Both families feature similar material and electrical specifications and both utilize .025" pins, and selective plating.

C-Grid, based on a .100" grid, is designed for dense electronic packaging. It is comprised of straight and right angle headers in several styles including breakaway, shrouded, and end-to-end stackable. Also featured are board-to-board and wire-to-board connectors. Two-circuit shunts, which act as a switch, complete the C-Grid product family. A line of insulation displacement type application tooling is offered to terminate the wire-to-board connector.

C-Grid single row boasts preassembled, single piece construction, modularity, design flexibility and automated harness-making capabilities when combined with our tooling.

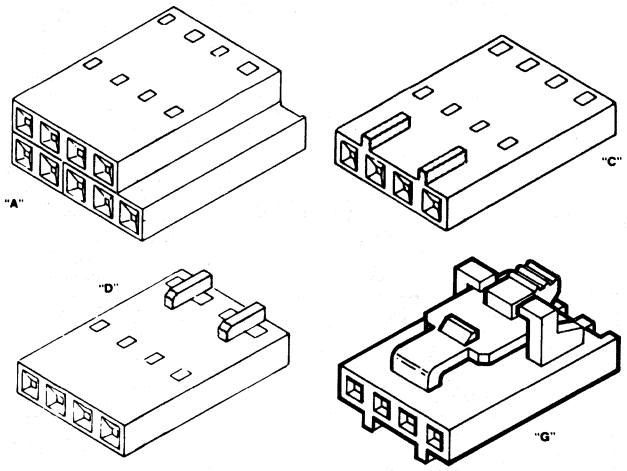
These four low profile, stackable housings form the basis of the single row system. Each housing accommodates either male or female terminals, ID-type or crimp. All the other components in the C-Grid SL system revolve around these four housings.

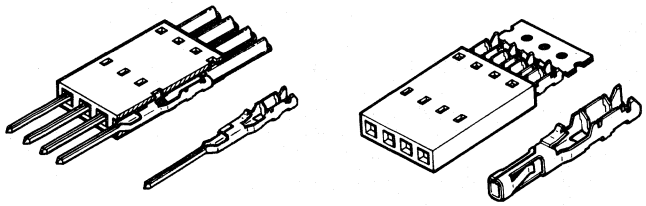
The "A" version is infinitely stackable on the X-Y matrix.

The "C" version has ribs on the front end which polarize and also prevent the housing from twisting off the mating pins during mating/disconnect.

The "D" version has back ribs which polarize, guide and maintain the connector into position within its interim module.

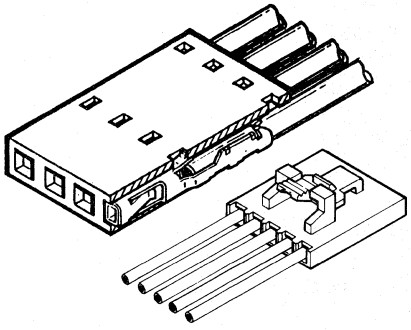
The "G" version has front ribs, a positive locking latch and anti-entanglement ribs to prevent wires from catching under the latch during harness-making and storage.

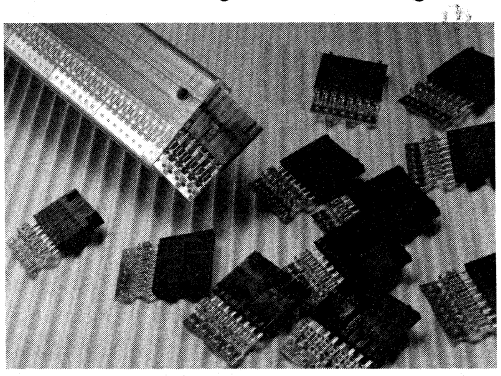




C-Grid single row boasts preassembled, single piece construction of its insulation displacement-type connector assemblies. These are created by interlacing two reels of male or female terminals stamped on .200" centers and feeding into the housings.

Preloaded assemblies are then loaded into plastic tubes which protect the product during shipping and also allow the connector to be integrated into highly automated harness production.

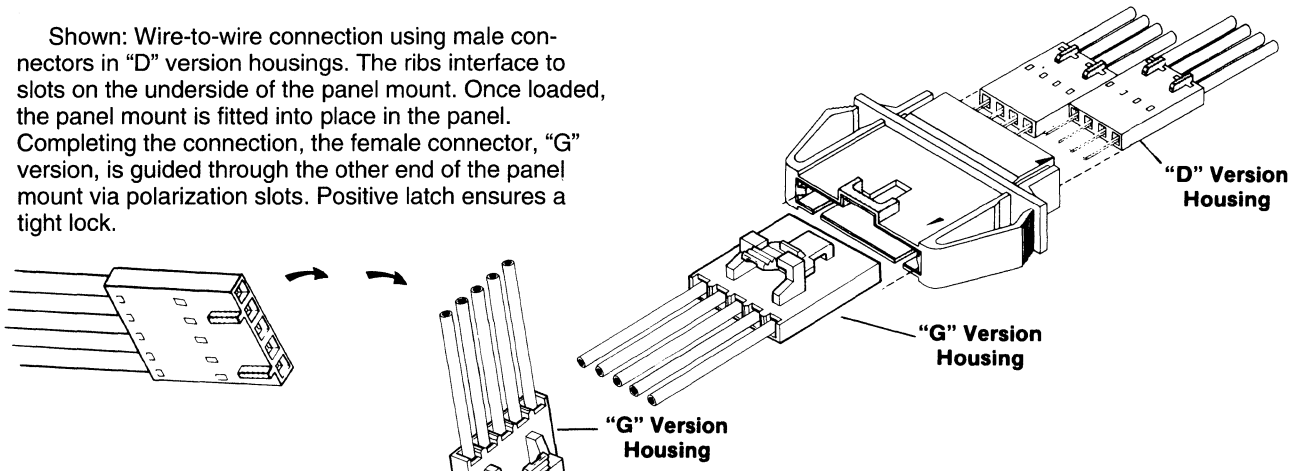




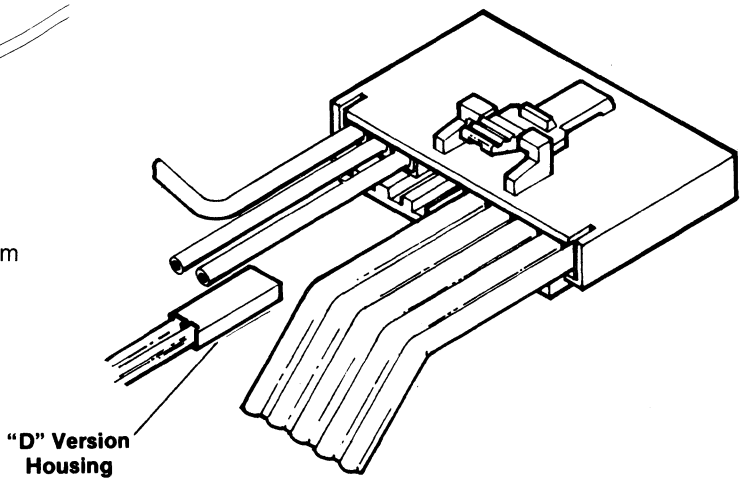
After termination the housings are locked over the terminal and the carrier strip is broken off. This automated process, with built in diagnostic systems, assures quality products.

C-Grid High Density Connectors

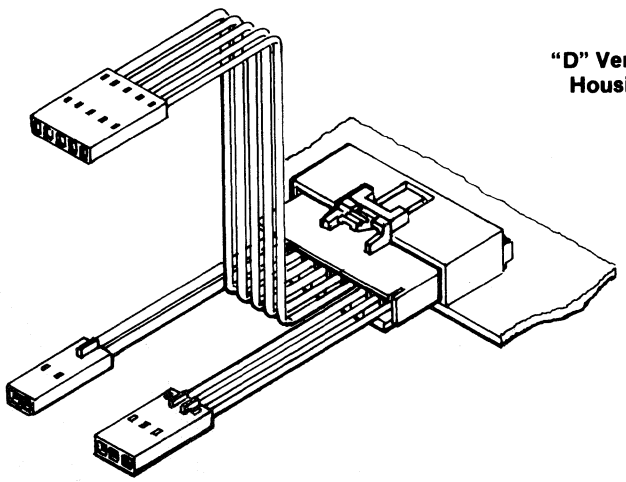
Shown: Wire-to-wire connection using male connectors in "D" version housings. The ribs interface to slots on the underside of the panel mount. Once loaded, the panel mount is fitted into place in the panel. Completing the connection, the female connector, "G" version, is guided through the other end of the panel mount via polarization slots. Positive latch ensures a tight lock.



Shown: Wire-to-board connection using a shrouded header with PC board locks and a "G" version female connector. The polarizing ribs on the connector prevent it from breaking or bending the pins on the header during mating and disconnect. Note positive latching feature.



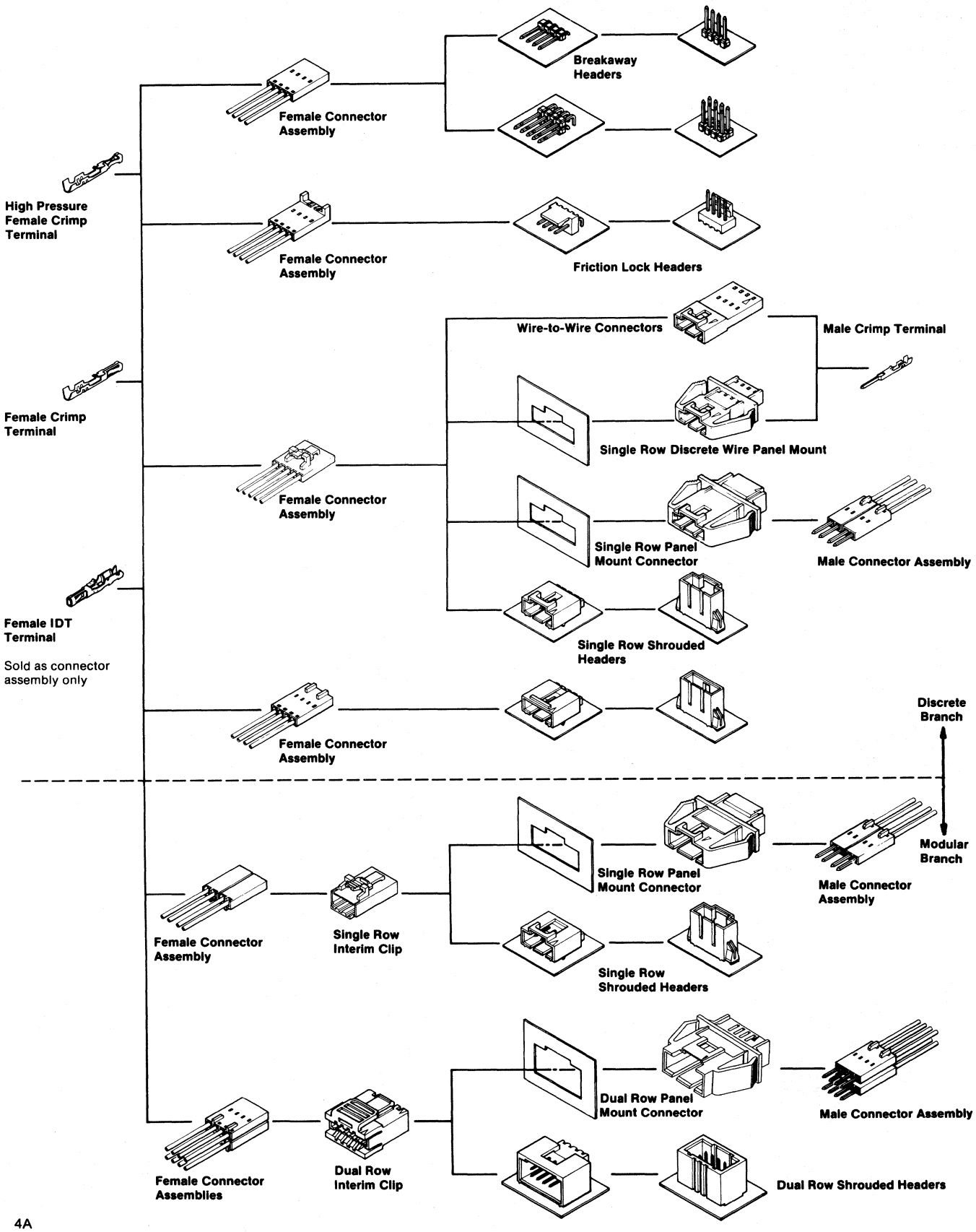
Shown: Gang loading of subassemblies in an interim clip module. The slots in the clip guide the "D" version housing during loading and also prevent the housings from drifting within the clip.



Shown: Modular wire-to-board interconnection.

C-Grid™
Modular Interconnection System

A



Specifications for C-Grid Crimp Terminals

70021 Male Crimp Terminal

Terminal Material:
Phosphor bronze

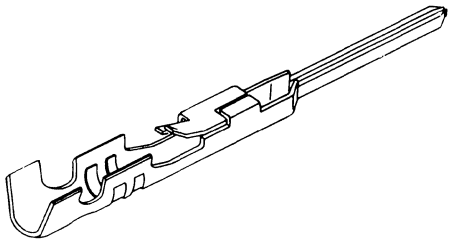
Plating:
30µ" select gold over nickel
15µ" select gold over nickel
150µ" tin/lead over
50µ" nickel overall

Current Rating:
3.0 amps (24 AWG) 30°C rise over ambient

Maximum Insulation Diameter and Wire Gauge Range:
.064" - 22-24 AWG
.060" - 24-30 AWG
.025" - 32-36 AWG

Pin Height (Measure from Top of Housing:
.300" maximum
.280" minimum

U.L. Listed and CSA Certified



70058 Female Crimp Terminal

Terminal Material:
Phosphor bronze

Plating:
30µ" select gold over nickel
15µ" select gold over nickel
150µ" tin/lead over
50µ" nickel overall

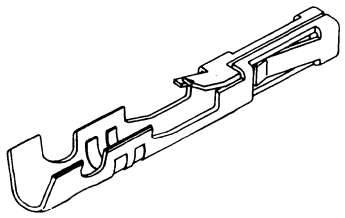
Current Rating:
3.0 amps (24 AWG) 30°C rise over ambient

Maximum Insulation Diameter and Wire Gauge Range:
.064" - 22-24 AWG
.060" - 24-30 AWG

Minimum Mating Pin Height:
.200" (measured from top of housing of PCB to top of pin)

Mating/Unmating Force:
Mating Max. insertion 8.0 oz.;
Min. withdrawal 1.0 oz.

U.L. Listed and CSA Certified



71851 High Force Female Crimp Terminal

Terminal Material:
Phosphor bronze

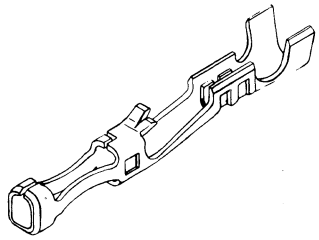
Plating:
30µ" select gold over nickel
15µ" select gold over nickel
150µ" tin/lead over
50µ" nickel overall

Current Rating:
3.0 amps (24 AWG) 30°C rise over ambient

Maximum Insulation Diameter and Wire Gauge Range:
.064" - 22-24 AWG
.060" - 24-30 AWG
.025" - 32-36 AWG

Minimum Mating Pin Height:
.200" (measured from top of housing or PCB to top of pin)

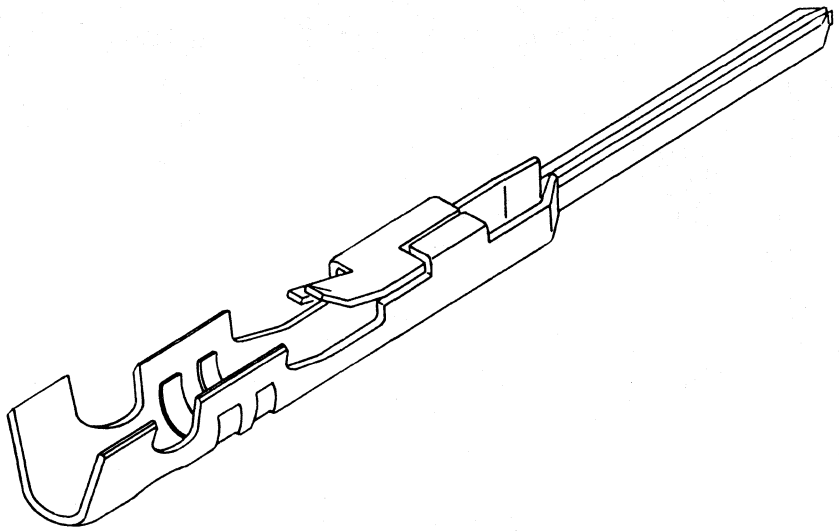
Mating/Unmating Force:
Insertion Force - 32.0 oz. max.
Withdrawal Force - 4.0 oz. min.

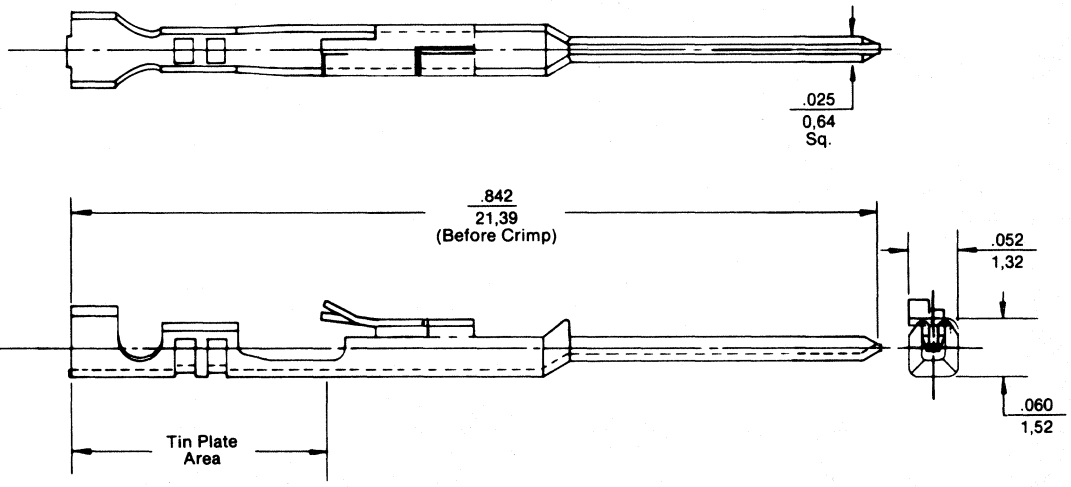


C-Grid
Male Crimp Terminal

A

- For use with connector housing 70066 and panel mount 70107
- Terminals accommodate wire ranges 22 and 24, and 24-30
- Three plating options available
- Available on reels or loose
- Mates with 70058 series box crimp terminals and 70400 insulation displacement-type connector assemblies





Dimensions/Ordering Information

* Plating Spec	Wire Range (AWG) Stranded	Insualtion Max. Outside Dia.	Order No.	* Plating Spec	Wire Range (AWG) Stranded	Insualtion Max. Outside Dia.	Order No.
	REEL FORM				LOOSE FORM		
1	22-24	.064	• 16-02-0116	1	22-24	.064	• 16-02-0117
	24-30	.060	• 16-02-0078		24-30	.060	• 16-02-0110
2	22-24	.064	• 16-02-0081	2	22-24	.064	• 16-02-0115
	24-30	.060	• 16-02-0077		24-30	.060	• 16-02-0109
3	22-24	.064	• 16-02-0107	3	22-24	.064	• 16-02-0114
	24-30	.060	• 16-02-0105		24-30	.060	• 16-02-0108

*** Plating Specifications/Options**

1. 30 µ in. min. gold in select area over 50 µ in. min, nickel overall with 75 µ in. tin/lead in select area.
2. 15 µ in. min. gold in select area over 50 µ in. min. nickel overall with 75 µ in. min. tin/lead in select area.
3. 150 µ" tin/lead over 50 µ" nickel overall.

• U.S. Standard Product, available through Molex franchised distributors.

Reels contain average 20,000 to 25,000 terminals.

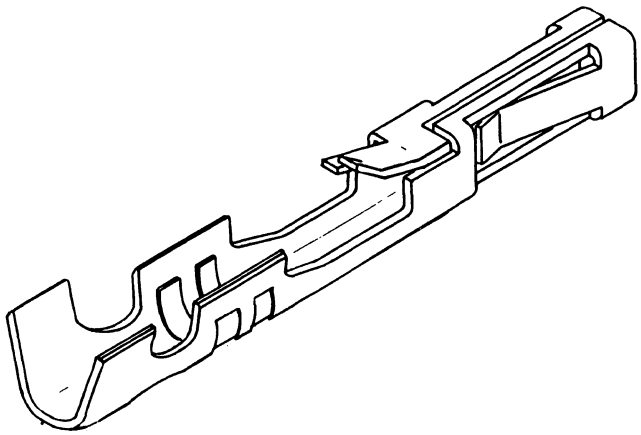
Highlighted area denotes preferred standard product. Usually available with shorter leadtimes.

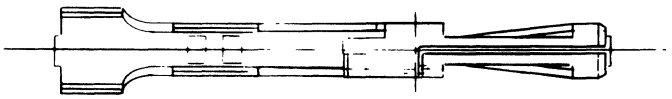
C-Grid™
Box Female Crimp Terminal

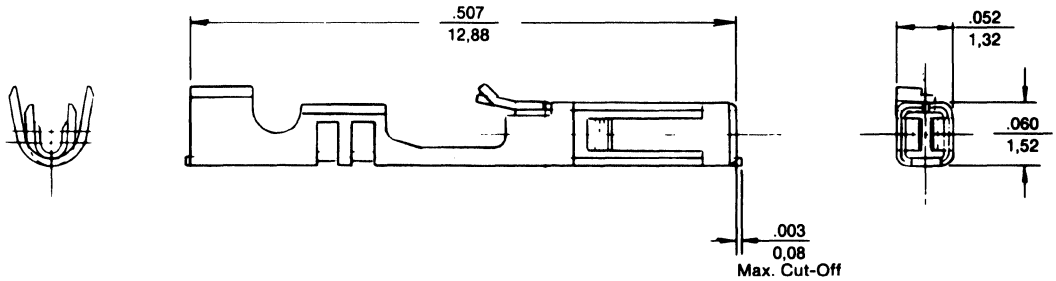
A

70058 Series

- For use with all versions of connector housings 70066 and 70450
- Terminals accommodate wire ranges 22 and 24, 24-30
- Three plating options available
- Available on reels or loose
- Dual beam, fully enclosed box contact with locking lance
- Mates with .100" center single- or dual-row headers or .025" pins







Dimensions/Ordering Information

* Plating Spec	Wire Range (AWG) Stranded	Insualtion Max. Outside Dia.	Order No.	* Plating Spec	Wire Range (AWG) Stranded	Insualtion Max. Outside Dia.	Order No.
	REEL FORM				LOOSE FORM		
1	22-24	.064	• 16-02-0088	1	22-24	.064	• 16-02-0104
	24-30	.060	• 16-02-0083		24-30	.060	• 16-02-0098
2	22-24	.064	• 16-02-0087	2	22-24	.064	• 16-02-0103
	24-30	.060	• 16-02-0082		24-30	.060	• 16-02-0097
3	22-24	.064	• 16-02-0086	3	22-24	.064	• 16-02-0102
	24-30	.060	• 16-02-0069		24-30	.060	• 16-02-0096

*** Plating Specifications/Options**

1. 30 µ in. min. gold in select area over 50 µ in. min. nickel overall with 75 µ in. tin/lead in select area.
2. 15 µ in. min. gold in select area over 50 µ in. min. nickel overall with 75 µ in. min. tin/lead in select area.
3. 150 µ" tin/lead over 50 µ" nickel overall.

• U.S. Standard Product, available through Molex franchised distributors.

Reels contain average 20,000 to 25,000 terminals.

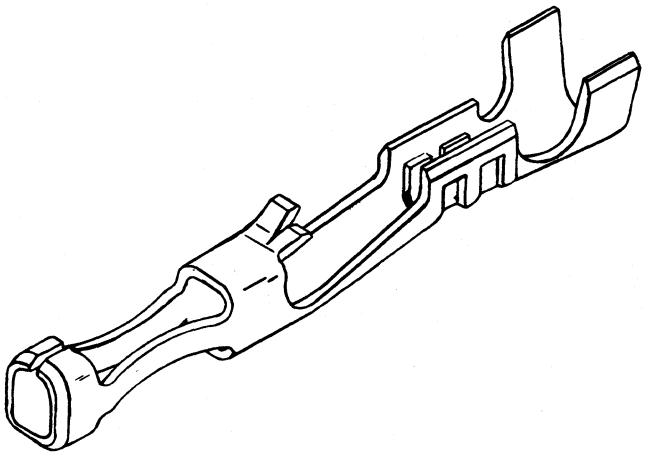
▨ Highlighted area denotes preferred standard product. Usually available with shorter leadtimes.

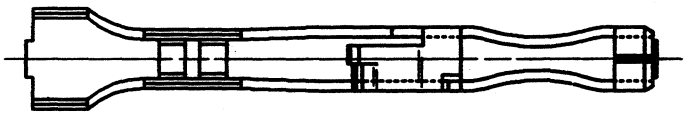
High Force Female Crimp Terminal

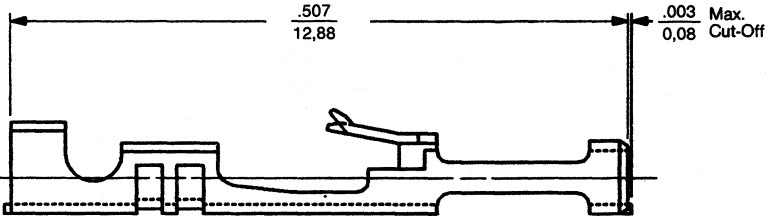
A

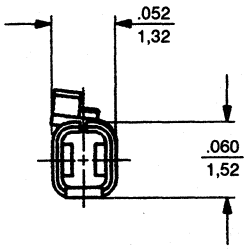
71851 Series

- For use with all versions of connector housings 70066 and 70450
- Terminals accommodate wire ranges 22-24, 24-30
- Dual beam, fully enclosed box contact with locking lance
- Three plating options available
- Available on reels or loose
- Mates with .100" (2,54mm) center single row and dual row headers and .025" (0,64mm) pins
- Higher mating force than standard crimp terminal: Insertion force - 32 oz. max; Withdrawal force - 4.0 oz. min.









Dimensions/Ordering Information

* Plating Spec	Wire Range (AWG) Stranded	Insualtion Max. Outside Dia.	Order No.	* Plating Spec	Wire Range (AWG) Stranded	Insualtion Max. Outside Dia.	Order No.
	REEL FORM				LOOSE FORM		
1	22-24	.064	• 16-02-1111	1	22-24	.064	• 16-02-1115
	24-30	.060	• 16-02-1113		24-30	.060	• 16-02-1117
2	22-24	.064	• 16-02-1124	2	22-24	.064	• 16-02-1125
	24-30	.060	• 16-02-0119		24-30	.060	• 16-02-1109
3	22-24	.064	• 16-02-1110	3	22-24	.064	• 16-02-1114
	24-30	.060	• 16-02-1112		24-30	.060	• 16-02-1116

*** Plating Specifications/Options**

1. 30 µ in. min. gold in select area over 50 µ in. min, nickel overall with 75 µ in. tin/lead.
2. 15 µ in. min. gold in select area over 50 µ in. min. nickel overall with 75 µ in. min. tin/lead in select area.
3. 150 µ" tin/lead over 50 µ" nickel overall.

• U.S. Standard Product, available through Molex franchised distributors.

Reels contain average 20,000 to 25,000 terminals.

Highlighted area denotes preferred standard product. Usually available with shorter leadtimes.

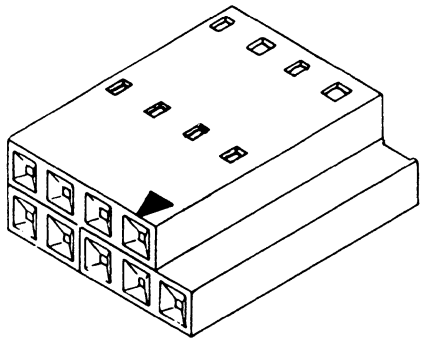
Single Row Crimp Connector Housings

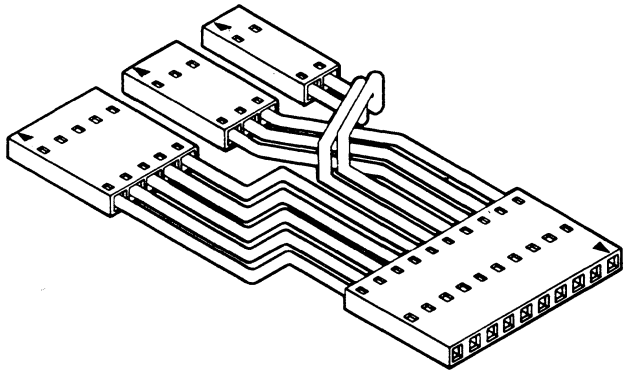
A

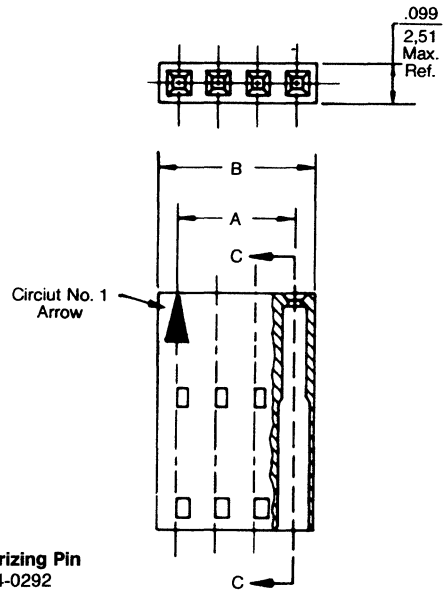
70066 Series

"A" Version, Non-Polarized, End-to-End and Side-by-Side Stackable

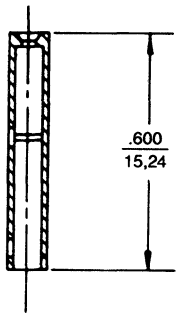
- For use with crimp terminals 70021, 70058 and 71851
- Mates with unshrouded headers 70206, 70203, 8624, 42375 and 42377
- Circuit sizes 2-25

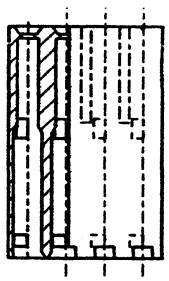






Section C-C





Universal Polarizing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Cirsuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.199 5,05	7	.600 15,24	.699 17,75	12	1.100 27,94	1.199 30,45	17	1.600 40,64	1.699 43,15	22	2.100 53,34	2.199 55,85
3	.200 5,08	.299 7,59	8	.700 17,78	.799 20,29	13	1.200 30,48	1.299 32,99	18	1.700 43,18	1.799 45,69	23	2.200 55,88	2.299 58,39
4	.300 7,62	.399 10,13	9	.800 20,32	.899 22,83	14	1.300 33,02	1.399 35,53	19	1.800 45,72	1.899 48,23	24	2.300 58,42	2.399 60,93
5	.400 10,16	.499 12,67	10	.900 22,86	.999 25,37	15	1.400 35,56	1.499 38,07	20	1.900 48,26	1.999 50,77	25	2.400 60,96	2.499 63,47
6	.500 12,70	.599 15,21	11	1.000 25,40	1.099 27,91	16	1.500 38,10	1.599 40,61	21	2.000 50,80	2.099 53,31			

Ordering Information

Order No. • 50-57-90XX
Replace "XX" with number of circuits, 02-25

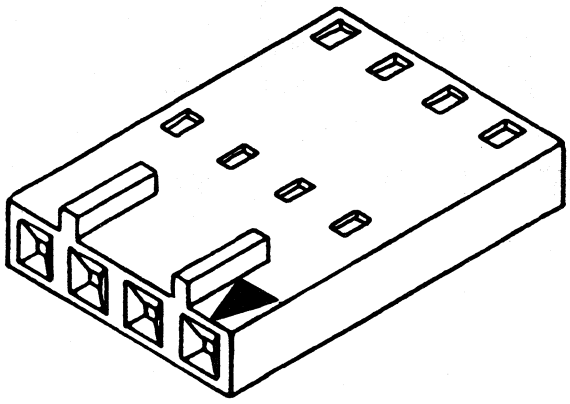
• U.S. Standard Product, available through Molex franchised distributors.

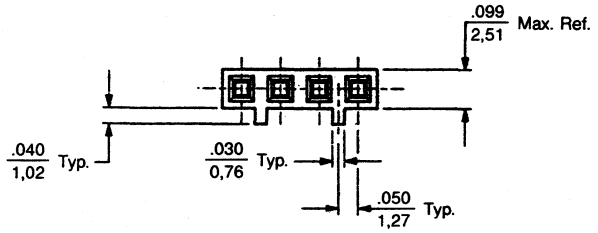
Single Row Crimp Connector Housings

A

70066 Series
"C" Version, End-to-End Stackable

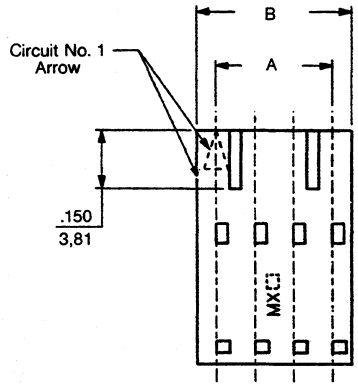
- Front ribs prevent contact damage when unmating the connector from a header. The housing cannot be twisted off pins
- For use with crimp terminals 70058 and 71851
- Mates with C-Grid SL shrouded headers, without positive latch, 70544, 70546, 70554, 70556
- Circuit sizes 2-25



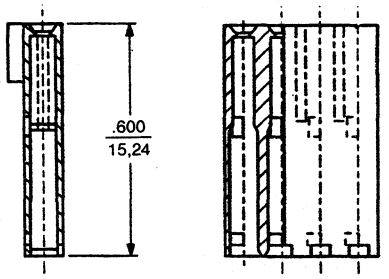


Rib Location for 2 & 3 Circuit Housing





Section C-C



Universal Polarizing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circiuts	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.199 5,05	7	.600 15,24	.699 17,75	12	1.110 27,94	1.199 30,45	17	1.600 40,64	1.699 43,15	22	2.100 53,34	2.199 55,85
3	.200 5,08	.299 7,59	8	.700 17,78	.799 20,29	13	1.200 30,48	1.299 32,99	18	1.700 43,18	1.799 45,69	23	2.200 55,88	2.299 58,39
4	.300 7,62	.399 10,13	9	.800 20,32	.899 22,83	14	1.300 33,02	1.399 35,53	19	1.800 45,72	1.899 48,23	24	2.300 58,42	2.399 60,93
5	.400 10,16	.499 12,67	10	.900 22,86	.999 25,37	15	1.400 35,56	1.499 38,07	20	1.900 48,26	1.999 50,77	25	2.400 60,96	2,499 63,47
6	.500 12,70	.599 15,21	11	1.000 25,40	1.099 27,91	16	1.500 38,10	1.599 40,61	21	2.000 50,80	2.099 53,31			

Ordering Information

Order No. •50-57-92XX
Replace "XX" with number of circuits, 02-25

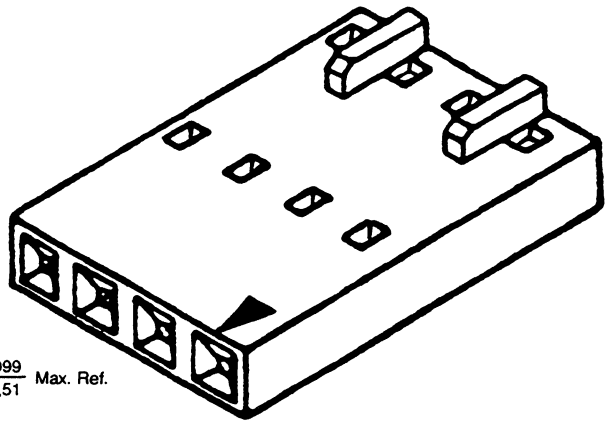
• U.S. Standard Product, available through Molex franchised distributors

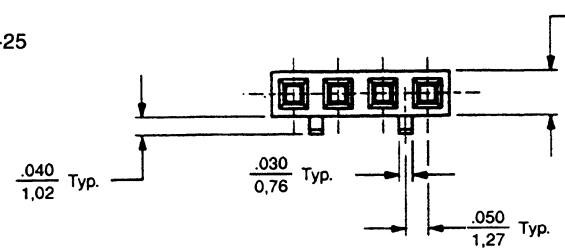
Single Row Crimp Connector Housings

A

70066 Series
"D" Version, End-to-End Stackable

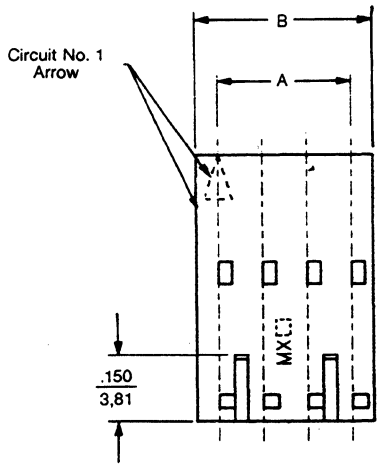
- Back ribs maintain position of connector housings in clips; prevents lateral movement when another housing is removed
- For use with crimp terminals 70021, 70058 and 71851
- Mates with panel mounts 70104, 70022 and 70018 and with interim clips 70004 and 70013
- Circuit sizes 2-25



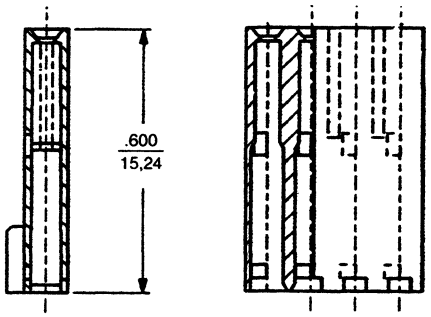


Rib Location for 2 & 3 Circuit Housing





Section C-C



Universal Polarizing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.199 5,05	7	.600 15,24	.699 17,75	12	1.100 27,94	1.199 30,45	17	1.600 40,64	1.699 43,15	22	2.100 53,34	2.199 55,85
3	.200 5,08	.299 7,59	8	.700 17,78	.799 20,29	13	1.200 30,48	1.299 32,99	18	1.700 43,18	1.799 45,69	23	2.200 55,88	2.299 58,39
4	.300 7,62	.399 10,13	9	.800 20,32	.899 22,83	14	1.300 33,02	1.399 35,53	19	1.800 45,72	1.899 48,23	24	2.300 58,42	2.399 60,93
5	.400 10,16	.499 12,67	10	.900 22,86	.999 25,37	15	1.400 35,56	1.499 38,07	20	1.900 48,26	1.999 50,77	25	2.400 60,96	2.499 63,47
6	.500 12,70	.599 15,21	11	1.000 25,40	1.099 27,91	16	1.500 38,10	1.599 40,61	21	2.000 50,80	2.099 53,31			

Ordering Information

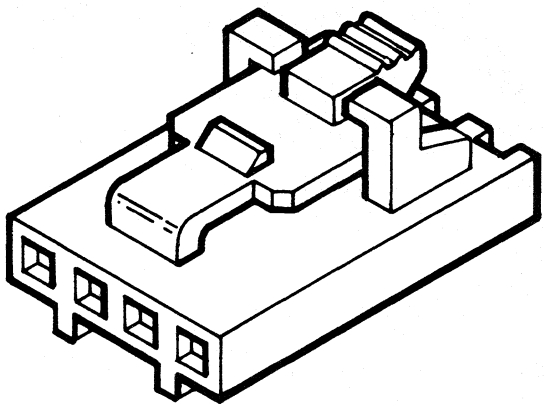
Order No. • 50-57-93XX
Replace "XX" with number of circuits, 02-25

• U.S. Standard Product, available through Molex franchised distributors.

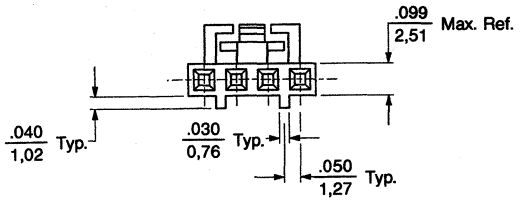
Single Row Crimp Connector Housings

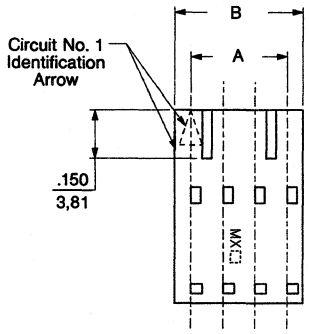
A

70066 Series
"G" Version, End-to-End Stackable

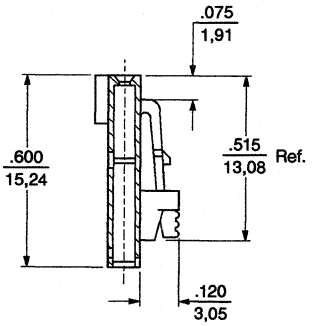


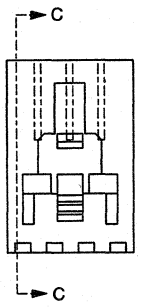
- For use with crimp terminals 70058 and 71851
- Anti-entanglement/ overstress ribs prevent discrete wires from catching under latch during harness manufacturing and storage
- Positive latch secures the housing into mating part
- Front ribs prevent contact damage when unmating the connector from a header. The housing cannot be twisted off pins
- Mates with latching headers 70543, 70545, 70553 and 70555, and panel mounts 70018, 70104 and 70107

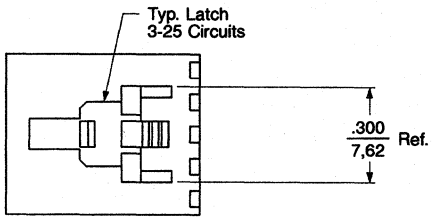




Section C-C







Universal Polarizing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.199 5,05	7	.600 15,24	.699 17,75	12	1.100 27,94	1.199 30,45	17	1.600 40,64	1.399 43,15	22	2.100 53,34	2.199 55,85
3	.200 5,08	.299 7,59	8	.700 17,78	.799 20,29	13	1.200 30,48	1.299 32,99	18	1.700 43,18	1.799 45,69	23	2.200 55,88	2.299 58,39
4	.300 7,62	.399 10,13	9	.800 20,32	.899 22,83	14	1.300 33,02	1.399 35,53	19	1.800 45,72	1.899 48,23	24	2.300 58,42	2.399 60,93
5	.400 10,16	.499 12,67	10	.900 22,86	.999 25,37	15	1.400 35,56	1.499 38,07	20	1.900 48,26	1.999 50,77	25	2.400 60,96	2.499 63,47
6	.500 12,70	.599 15,21	11	1.000 25,40	1.099 27,91	16	1.500 38,10	1.599 40,61	21	2.000 50,80	2.099 53,31			

Ordering Information

Order No. • 50-57-94XX
Replace "XX" with number of circuits, 02-25

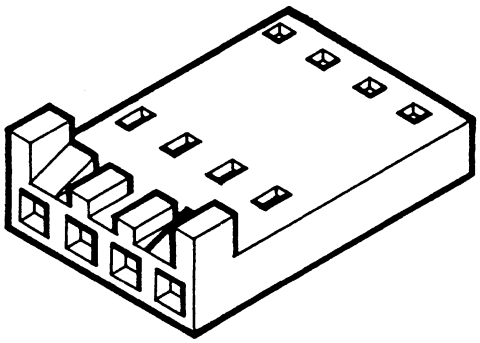
• U.S. Standard Product, available through Molex franchised distributors.

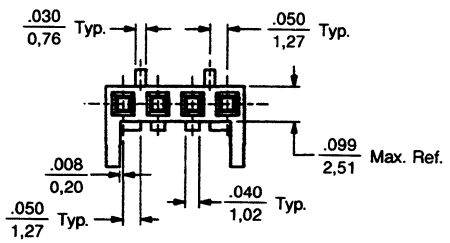
Single Row Crimp Connector Housing

A

70066 Series
"H" Version

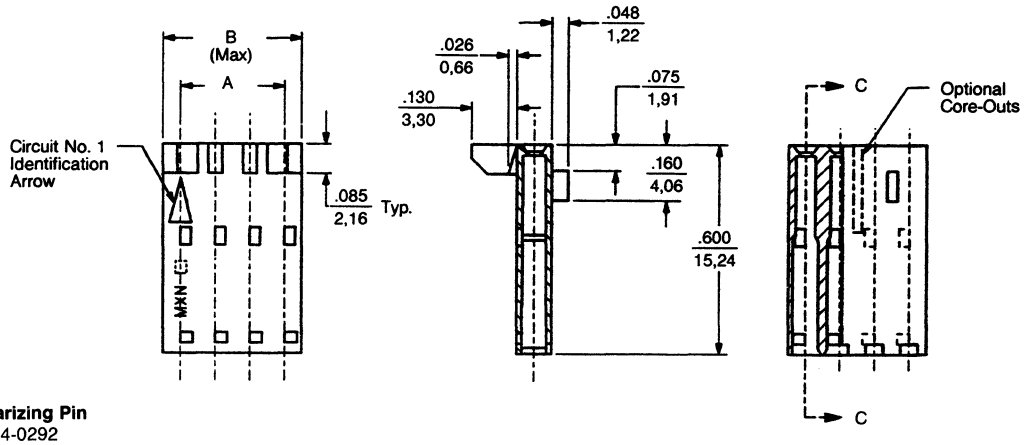
- For use with crimp terminals 70058 and 71851
- Stackable end-to-end
- Mates with Molex KK Series PCB headers with friction lock, e.g. 6373 & 7478.





Rib Location for 2 & 3 Circiut Housing





Universal Polarizing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.199 5,05	7	.600 15,24	.699 17,75	12	1.100 27,94	1.199 30,45	17	1.600 40,64	1.699 43,15	22	2.100 53,34	2.199 55,85
3	.200 5,08	.299 7,59	8	.700 17,78	.799 20,29	13	1.200 30,48	1.299 32,99	18	1.700 43,18	1.799 45,69	23	2.200 55,88	2.299 58,39
4	.300 7,62	.399 10,13	9	.800 20,32	.899 22,83	14	1.300 33,02	1.399 35,53	19	1.800 45,72	1.899 48,23	24	2.300 58,42	2.399 60,93
5	.400 10,16	.499 12,67	10	.900 22,86	.999 25,37	15	1.400 35,56	1.499 38,07	20	1.900 48,26	1.999 50,77	25	2.400 60,96	2.499 63,47
6	.500 12,70	.599 15,21	11	1.000 25,40	1.099 27,91	16	1.500 38,10	1.599 40,61	21	2.000 50,80	2.099 53,31			

Ordering Information

Order No. • 50-57-95XX
Replace "XX" with number of circuits, 02-25

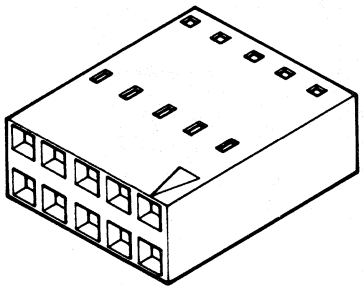
• U.S. Standard Product, available through Molex franchised distributors.

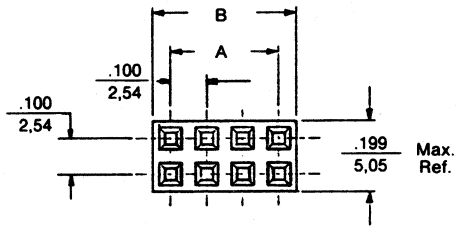
Dual Row
Crimp Connector Housing

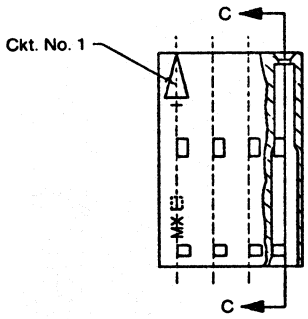
A

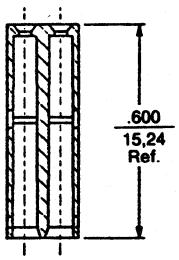
70450 Series
"A" Version

- End-to-end and side-by-side stackable on .100" grid
- For use with 70058 and 71851 box crimp terminal
- Mates with Molex dual row headers 8723, 8724, 70206, 70203 and 8624
- Circuit sizes 4-54









Section C-C

Universal Polarizing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.100 2,54	.199 5,05	16	.700 17,78	.799 20,29	26	1.200 30,48	1.299 32,99	36	1.700 43,18	1.799 45,69	46	2.200 55,88	2.299 58,39
6	.200 5,08	.299 7,59	18	.800 20,32	.899 22,83	28	1.300 33,02	1.399 35,53	38	1.800 45,72	1.899 48,23	48	2.300 58,42	2.399 60,93
8	.300 7,62	.399 10,13	20	.900 22,86	.999 25,37	30	1.400 35,56	1.499 38,07	40	1.900 48,26	1.999 50,77	50	2.400 60,96	2.499 63,47
10	.400 10,16	.499 12,67	22	1.000 25,40	1.099 27,91	32	1.500 38,10	1.599 40,61	42	2.000 50,80	2.099 53,31	52	2.500 63,50	2.599 66,01
12	.500 12,70	.599 15,21	24	1.100 27,94	1.199 30,45	34	1.600 40,64	1.699 43,15	44	2.100 53,34	2.199 55,85	54	2.600 66,04	2.699 68,55
14	.600 15,24	.699 17,75												

Ordering Information

Order No. • 22-55-2XX1
Replace "XX" with number of circuits, 02-54 (even numbers only)

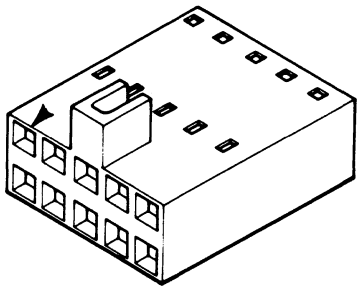
• U.S. Standard Product, available through Molex franchised distributors.

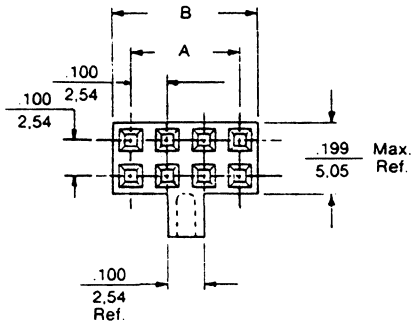
Dual Row
Crimp Connector Housing

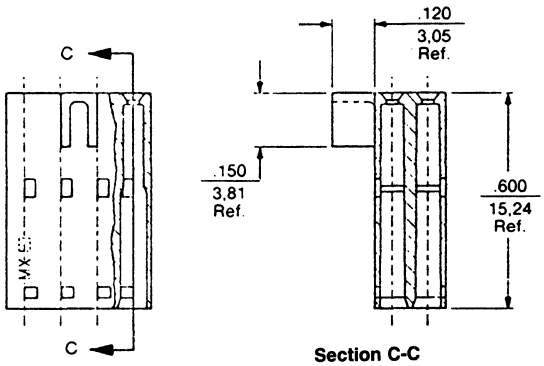
A

70450 Series
"B" Version

- Polarized
- End-to-end stackable
- For use with 70058 and 71851 box crimp terminals
- Mates with Molex dual row ribbon cable style headers (MX50) without latches, "A" style
- Circuit sizes 4-54







Section C-C

Universal Polarizing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.100 2,54	.199 5,05	16	.700 17,78	.799 20,29	26	1.200 30,48	1.299 32,99	36	1.700 43,18	1.799 45,69	46	2.200 55,88	2.299 58,39
6	.200 5,08	.299 7,59	18	.800 20,32	.899 22,83	28	1.300 33,02	1.399 35,53	38	1.800 45,72	1.899 48,23	48	2.300 58,42	2.399 60,93
8	.300 7,62	.399 10,13	20	.900 22,86	.999 25,37	30	1.400 35,56	1.499 38,07	40	1.900 48,26	1.999 50,77	50	2.400 60,96	2.499 63,47
10	.400 10,16	.499 12,67	22	1.000 25,40	1.099 27,91	32	1.500 38,10	1.599 40,61	42	2.000 50,80	2.099 53,31	52	2.500 63,50	2.599 66,01
12	.500 12,70	.599 15,21	24	1.100 27,94	1.199 30,45	34	1.600 40,64	1.699 43,15	44	2.100 53,34	2.199 55,85	54	2.600 66,04	2.699 68,55
14	.600 15,24	.699 17,75												

Ordering Information

Order No. • 22-55-2XX2
Replace "XX" with number of circuits, 02-28 (even numbers only)

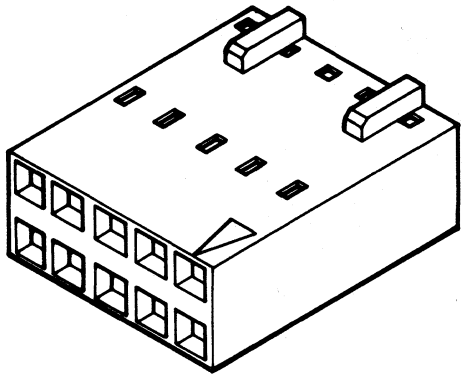
• U.S. Standard Product, available through Molex franchised distributors.

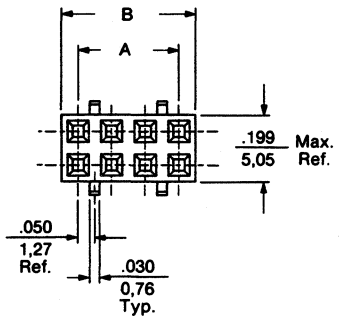
Dual Row
Crimp Connector Housing

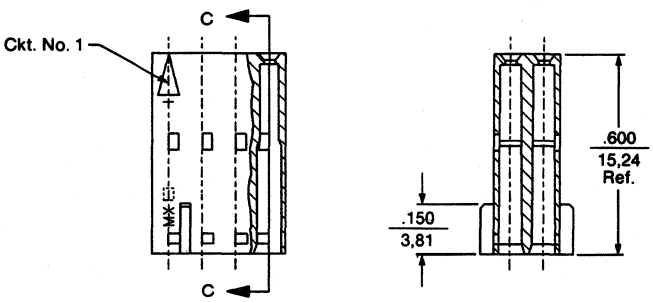
A

70450 Series
"C" Version

- Designed to be used with 70013 Dual Row Interim Clip
- Back ribs maintain position of connector housings in clip; prevents lateral movement when another housing is removed.
- End-to-end stackable
- For use with 70058 and 71851 box crimp terminals







Universal Polarizing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.100 2,54	.199 5,05	16	.700 17,78	.799 20,29	26	1.200 30,48	1.299 32,99	36	1.700 43,18	1.799 45,69	46	2.200 55,88	2.299 58,39
6	.200 5,08	.299 7,59	18	.800 20,32	.899 22,83	28	1.300 33,02	1.399 35,53	38	1.800 45,72	1.899 48,23	48	2.300 58,42	2.399 60,93
8	.300 7,62	.399 10,13	20	.900 22,86	.999 25,37	30	1.400 35,56	1.499 38,07	40	1.900 48,26	1.999 50,77	50	2.400 60,96	2.499 63,47
10	.400 10,16	.499 12,67	22	1.000 25,40	1.099 27,91	32	1.500 38,10	1.599 40,61	42	2.000 50,80	2.099 53,31	52	2.500 63,50	2.599 66,01
12	.500 12,70	.599 15,21	24	1.100 27,94	1.199 30,45	34	1.600 40,64	1.699 43,15	44	2.100 53,34	2.199 55,85	54	2.600 66,04	2.699 68,55
14	.600 15,24	.699 17,75												

Ordering Information

Order No. • 22-55-2XX3
Replace "XX" with number of circuits, 04-54 (even number only)

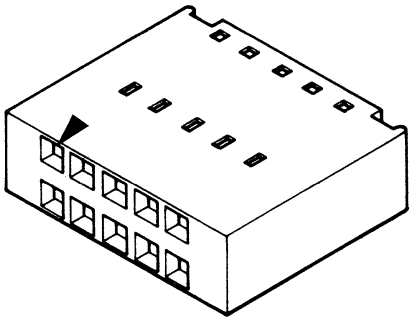
• U.S. Standard Product, available through Molex franchised distributors.

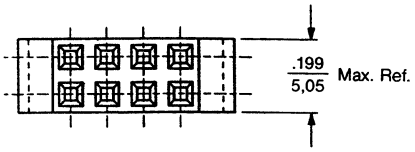
Dual Row
Crimp Connector Housing

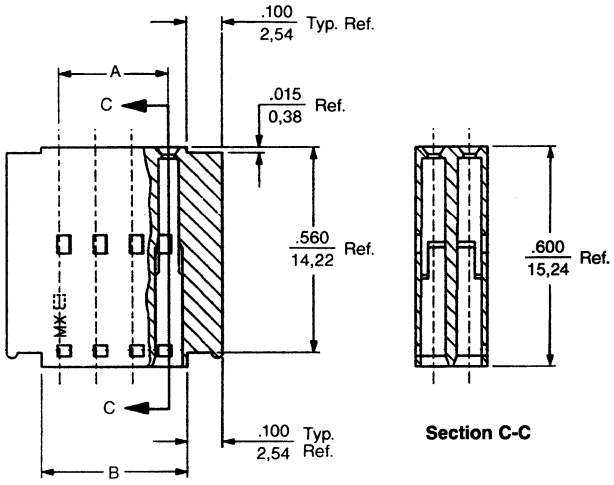
A

70450 Series
"D" Version

- Side-by-side stackable
- For use with 70058 and 71851 box crimp terminals
- Mates with Molex dual row ribbon cable style headers (MX 50) with latch/eject levers, style "C"
- Circuit sizes 4-50







Universal Polarizing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circiuts	Dim. A	Dim. B
4	.100 2,54	.199 5,05	14	.600 15,24	.699 17,75	24	1.100 27,94	1.199 30,45	34	1.600 40,64	1.699 43,15	44	2.100 53,34	2.199 55,85
6	.200 5,08	.299 7,59	16	.700 17,78	.799 20,29	26	1.200 30,48	1.299 32,99	36	1.700 43,18	1.799 45,69	46	2.200 55,88	2.299 58,39
8	.300 7,62	.399 10,13	18	.800 20,32	,899 22,83	28	1.300 33,02	1.399 35,53	38	1.800 45,72	1.899 48,23	48	2.300 58,42	2.399 60,93
10	.400 10,16	.499 12,67	20	.900 22,86	.999 25,37	30	1.400 35,56	1.499 38,07	40	1.900 48,26	1.999 50,77	50	2.400 60,96	2.499 63,47
12	.500 12,70	.599 15,21	22	1.000 25,40	1.099 27,91	32	1.500 38,10	1.599 40,61	42	2.000 50,80	2.099 53,31			

Ordering Information

Order No. • 22-55-3XX0
Replace "XX" with number of circuits, 04-50 (even numbers only)

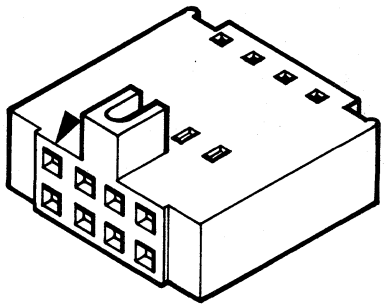
• U.S. Standard Product, available through Molex franchised distributors.

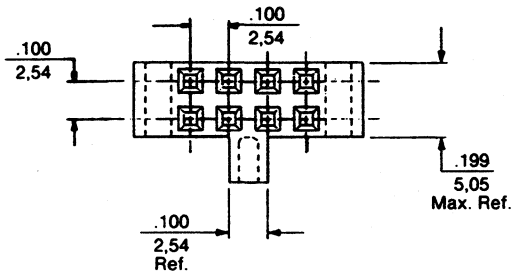
Dual Row
Crimp Connector Housing

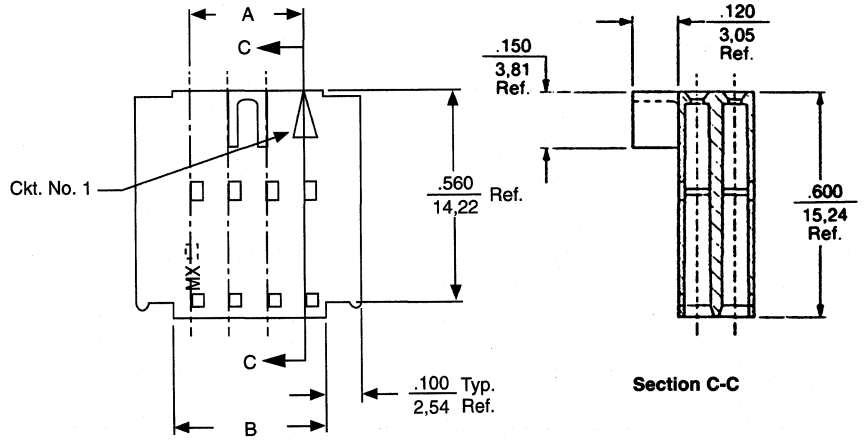
A

70450 Series
"E" Version

- Polarized
- For use with 70058 and 71851 box crimp terminals
- Mates with Molex dual row ribbon cable style headers (MX 50) with latch/eject levers, style "C"
- Circuit sizes 4-50







Universal Polarizing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.100 2,54	.199 5,05	14	.600 15,24	.699 17,75	24	1.100 27,94	1.199 30,45	34	1.600 40,64	1.699 43,15	44	2.100 53,34	2.199 55,85
6	.200 5,08	.299 7,59	16	.700 17,78	.799 20,29	26	1.200 30,48	1.299 32,99	36	1.700 43,18	1.799 45,69	46	2.200 55,88	2.299 58,39
8	.300 7,62	.399 10,13	18	.800 20,32	.899 22,83	28	1.300 33,02	1.399 35,53	38	1.800 45,72	1.899 48,23	48	2.300 58,42	2.399 60,93
10	.400 10,16	.499 12,67	20	.900 22,86	.999 25,37	30	1.400 35,56	1.499 38,07	40	1.900 48,26	1.999 50,77	50	2.400 60,96	2.499 63,47
12	.500 12,70	.599 15,21	22	1.000 25,40	1.099 27,91	32	1.500 38,10	1.599 40,61	42	2.000 50,80	2.099 53,31			

Ordering Information

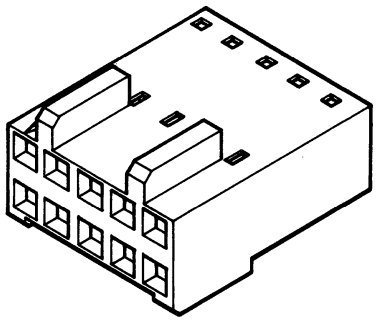
Order No. • 22-55-3XX1
Replace "XX" with number of circuits, 04-50 (even numbers only)

• U.S. Standard Product, available through Molex franchised distributors.

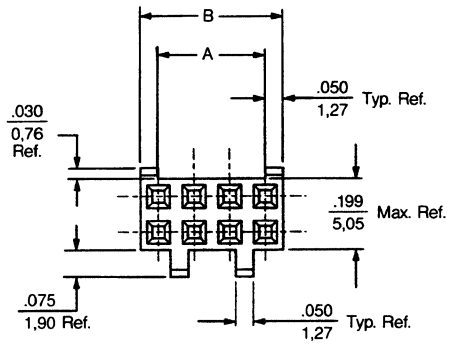
Dual Row
Crimp Connector Housing

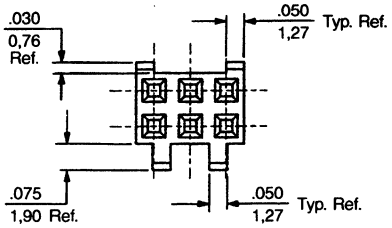
A

70450 Series
"F" Version

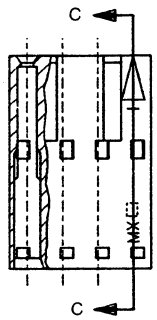


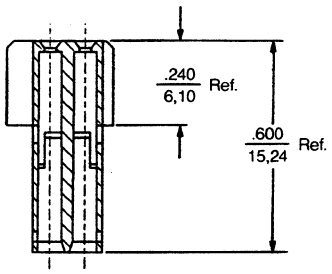
- Polarized
- End-to-end stackable
- For use with 70058 and 71851 box crimp terminals
- Mates with Molex dual row headers 8723, 8724, 70227, 70229
- Circuit sizes 6-54





6 Ckt. Only





Section C-C

Universal Polarizing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
6	.200 5,08	.299 7,59	16	.700 17,78	.799 20,29	26	1.200 30,48	1.299 32,99	36	1.700 43,18	1.799 45,69	46	2.200 55,88	2.299 58,39
8	.300 7,62	.399 10,13	18	.800 20,32	.899 22,83	28	1.300 33,02	1.399 35,53	28	1.800 45,72	1.899 48,23	48	2.300 58,42	2.399 60,93
10	.400 10,16	.499 12,67	20	.900 22,86	.999 25,37	30	1.400 35,56	1.499 38,07	40	1.900 48,26	1.999 50,77	50	2.400 60,96	2.499 63,47
12	.500 12,70	.599 15,21	22	1.000 25,40	1.099 27,91	32	1.500 38,10	1.599 40,61	42	2.000 50,80	2.099 53,31	52	2.500 63,50	2.599 66,01
14	.600 15,24	.699 17,75	24	1.100 27,94	1.199 30,45	34	1.600 40,64	1.699 43,15	44	2.100 53,34	2.199 55,85	54	2.600 66,04	2.699 68,55

Ordering Information

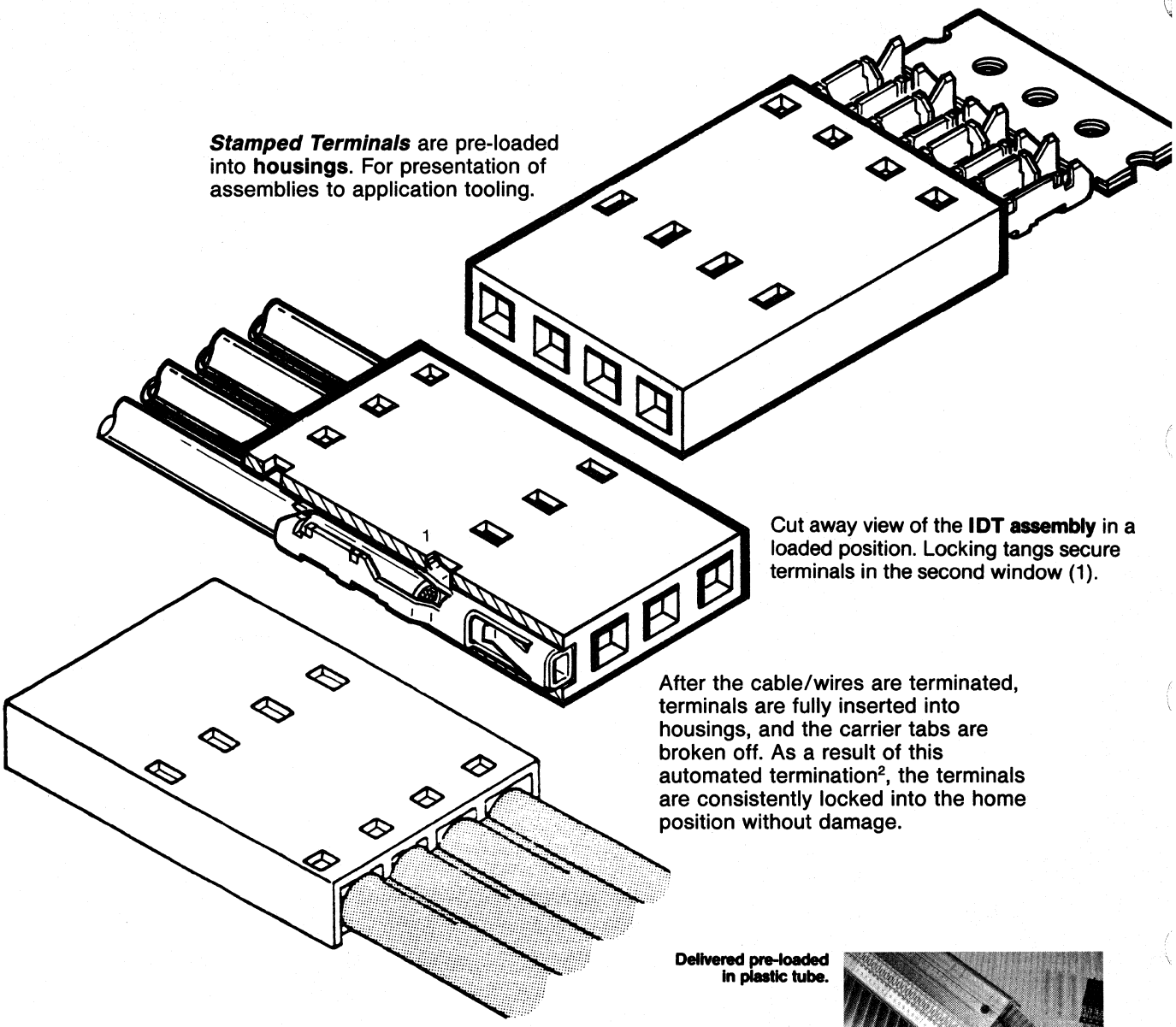
Order No. •22-56-6XX7
Replace "XX" with number of circuits 06-54 (even numbers only)

• U.S. Standard product, available through Molex franchised distributors.

Single Row Female Insulation Displacement Connector Assembly

A

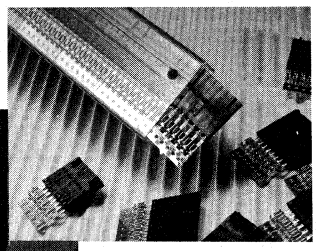
Stamped Terminals are pre-loaded into **housings**. For presentation of assemblies to application tooling.



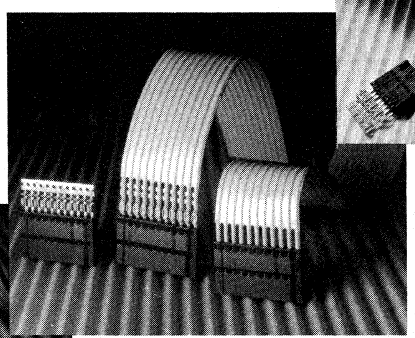
Cut away view of the **IDT assembly** in a loaded position. Locking tangs secure terminals in the second window (1).

After the cable/wires are terminated, terminals are fully inserted into housings, and the carrier tabs are broken off. As a result of this automated termination[2], the terminals are consistently locked into the home position without damage.

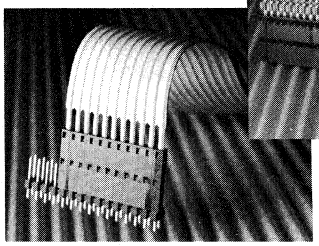
Delivered pre-loaded in plastic tube.



Shown from left: product pre-loaded, mass terminated by ID method, fully inserted into housing.



Assembled connector mated with header.

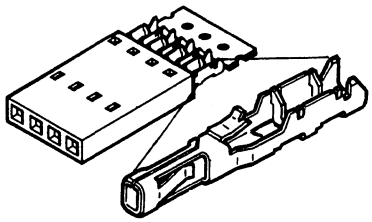


[2]Application equipment described in Section M.

Specifications for Single Row Female IDT Connectors

A

Female Insulation Displacement Connector Assembly



This specification covers ID terminal, engineering series 70028, preassembled into housing 70066, becoming assembly 70400.

Material:

Housing - 94V-0 glass filled polyester, black

Terminal - Phosphor bronze

Electrical:

Contact Resistance - Less than 15 milliohms

Insulation Resistance - 10,000 megohms

Dielectric Strength - 600 VAC r.m.s. for 1 minute at sea level to 5,000 ft.

Current Ratings -
28 AWG 1.2A
26 AWG 1.8A
24 AWG 3.0A
22 AWG 3.0A

Capacitance - <1.2 picofarads

Platings:

No. 1 - 15 μ in. min. gold in select area over 50 μ in. min. nickel overall, with 75 μ in. min. electro-tin/lead in select area.

No. 2 - 30 μ in. min. gold in select area over 50 μ in. min. nickel plate overall, with 75 μ in. electro-tin/lead in select area.

No. 3 - 150 μ in. tin/lead over 50 μ in. nickel overall.

Environmental:

Operating Temperature Range - -40°c to 105°C

Mechanical:

Pin Height - Max: .320"; Min: .200" (measured from top of housing or P.C. board to top of pin)

Wire Range - Accepts discrete wire range from 28 to 22 AWG stranded, with .053" max. outside insulation diameter

Terminal Pullout Force from housing - Will withstand gradual applied force of 4 lbs. for 15 seconds

Insertion/Withdrawal Forces (individual contact) -
8.0 oz. max. insertion
1.0 oz. min. withdrawal

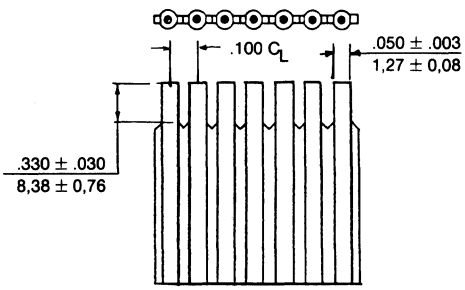
UL listed, CSA certified

Recommended Molex Cable Eng. Nos. to use with 70400 Series connectors:

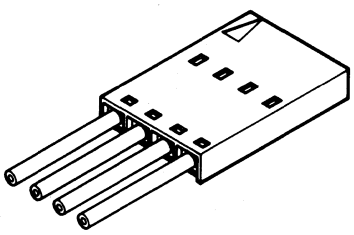
Accepts Round conductor flat cable from 28 to 24 AWG, with .053" max. outside insulation diameter

7307	8996
24241	8997
24226	24369
7767	24389

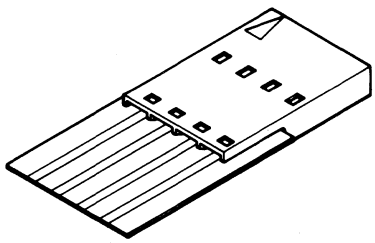
Notch Specification for Ribbon Cable



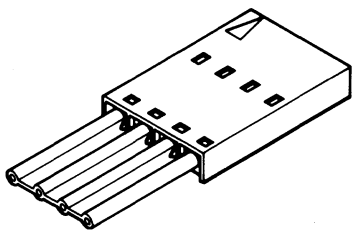
Wire and Cable Options



Discrete Wire
Section A, this catalog



Flat Flex Cable
Section G, this catalog



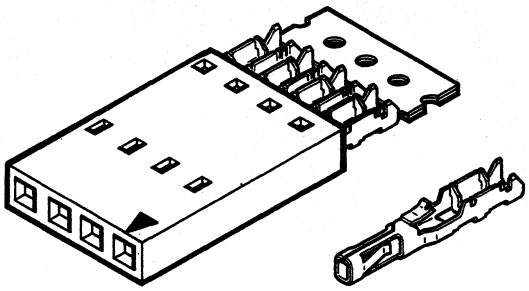
Ribbon Cable
Section G, this catalog

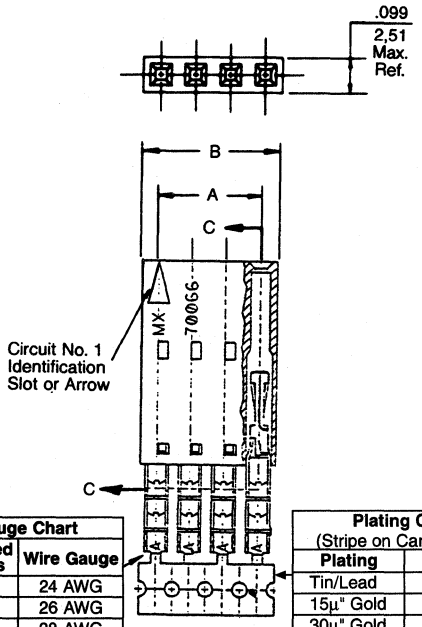
Single Row Female Insulation Displacement Connector Assembly

A

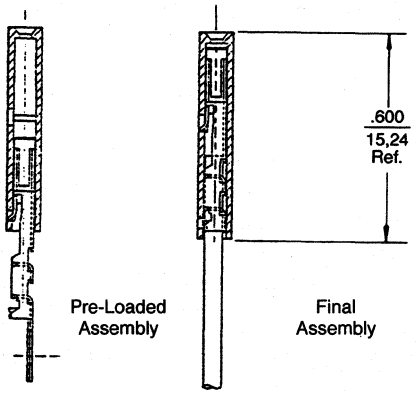
70400 Series
"A" Version Non-Polarized

- Pre-loaded, single piece construction allows for fully automated termination
- Packaged in plastic tubes to allow for automated manufacturing and to minimize product handling
- Stackable end-to-end and side-by-side
- Mates with single row headers 42375 and 42377 and dual row headers 8624 and 70203





Section C-C



Wire Gauge Chart	
Code Stamped on Terminals	Wire Gauge
A	24 AWG
B	26 AWG
C	28 AWG
D	22 AWG

Plating Code (Stripe on Carrier Strip)	
Plating	Color
Tin/Lead	None
15µ" Gold	Yellow
30µ" Gold	Red

Universal Polarizing Pin
Order No.
15-04-0292

NOTE: 2 circuit housings are pre-loaded in pairs.

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.199 5,05	7	.600 15,24	.699 17,75	12	1.100 27,94	1.199 30,45	17	1.600 40,64	1.699 43,15	22	2.100 53,34	2.199 55,85
3	.200 5,08	.299 7,59	8	.700 17,78	.799 20,29	13	1.200 30,48	1.299 32,99	18	1.700 43,18	1.799 45,69	23	2.200 55,88	2.299 58,39
4	.300 7,62	.399 10,13	9	.800 20,32	.899 22,83	14	1.300 33,02	1.399 35,53	19	1.800 45,72	1.899 48,23	24	2.300 58,42	2.399 60,93
5	.400 10,16	.499 12,67	10	.900 22,86	.999 25,37	15	1.400 35,56	1.499 38,07	20	1.900 48,26	1.999 50,77	25	2.400 60,96	2.499 63,47
6	.500 12,70	.599 15,21	11	1.000 25,40	1.099 27,91	16	1.500 38,10	1.599 40,61	21	2.000 50,80	2.099 53,31			

Ordering Information

PLATING: 15 MICROINCHES GOLD	PLATING: 30 MICROINCHES GOLD	PLATING: 150 MICROINCHES TIN/LEAD
Wire Accommodation 28 AWG		
Order No. 14-56-2**XX**5	**Order No.** 14-56-3**XX**2	**Order No.** 14-60-0**XX**5
Replace "**XX**" with number of circuits, 02-25	Replace "**XX**" with number of circuits, 02-25	Replace "**XX**" with number of circuits, 02-25
Wire Accommodation 26 AWG		
Order No. 14-56-2**XX**3	**Order No.** 14-56-2**XX**9	**Order No.** 14-60-0**XX**3
Replace "**XX**" with number of circuits, 02-25	Replace "**XX**" with number of circuits, 02-25	Replace "**XX**" with number of circuits, 02-25
Wire Accommodation 24 AWG		
Order No. • 14-56-2**XX**1	**Order No. 14-56-2XX**7	**Order No.** 14-60-0**XX**1
Replace "**XX**" with number of circuits, 02-25	Replace "**XX**" with number of circuits, 02-25	Replace "**XX**" with number of circuits, 02-25
Wire Accommodation 22 AWG		
Order No. 14-56-7**XX**4	**Order No.** 14-56-7**XX**9	**Order No.** 14-56-6**XX**9
Replace "**XX**" with number of circuits, 02-25	Replace "**XX**" with number of circuits, 02-25	Replace "**XX**" with number of circuits, 02-25

▨ Highlighted area denotes preferred standard product. Usually available with shorter leadtimes.

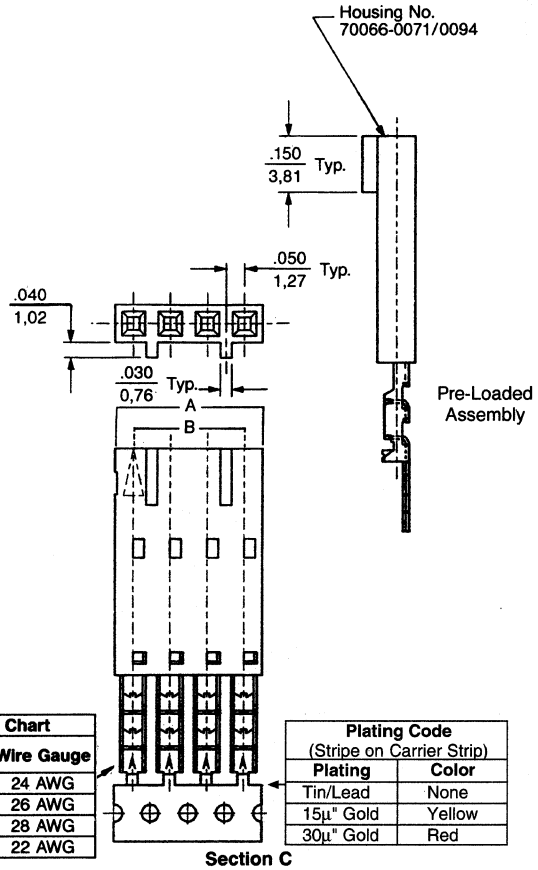
• U.S. Standard Product, available through Molex franchised distributors

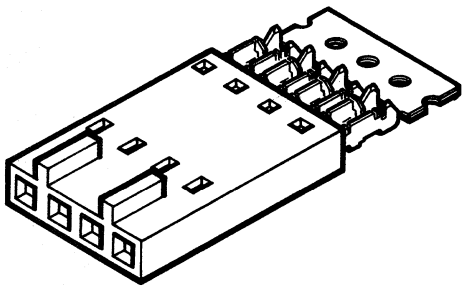
Single Row Female Insulation Displacement Connector Assembly

A

70400 Series
"C" Version

- Pre-loaded, single piece construction allows for fully automated termination
- Packaged in plastic tubes to allow for automated manufacturing and to minimize product handling
- Stackable end-to-end and back-to-back
- Front polarizing ribs prevent pin damage during disconnect. Housing cannot be twisted off pins
- Mates with polarized headers 70544, 70546, 70554, 70556





Rib Location for 2 & 3 Circuit Housing



Universal Polarizing Pin
Order No.
15-04-0292

Wire Gauge Chart	
Code Stamped on Terminals	**Wire Gauge**
A	24 AWG
B	26 AWG
C	28 AWG
D	22 AWG

Plating Code (Stripe on Carrier Strip)	
Plating	**Color**
Tin/Lead	None
15µ" Gold	Yellow
30µ" Gold	Red

Section C

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.199 5,05	7	.600 15,24	.699 17,75	12	1.100 27,94	1.199 30,45	17	1.600 40,64	1.699 43,15	22	2.100 53,34	2.199 55,85
3	.200 5,08	.299 7,59	8	.700 17,78	.799 20,29	13	1.200 30,48	1.299 32,99	18	1.700 43,18	1.799 45,69	23	2.200 55,88	2.299 58,39
4	.300 7,62	.399 10,13	9	.800 20,32	.899 22,83	14	1.300 33,02	1.399 35,53	19	1.800 45,72	1.899 48,23	24	2.300 58,42	2.399 60,93
5	.400 10,16	.499 12,67	10	.900 22,86	.999 25,37	15	1.400 35,56	1.499 38,07	20	1.900 48,26	1.999 50,77	25	2.400 60,96	2.499 63,47
6	.500 12,70	.599 15,21	11	1.000 25,40	1.099 27,91	16	1.500 38,10	1.599 40,61	21	2.000 50,80	2.099 53,31			

Ordering Information

PLATING: 15 MICROINCHES GOLD	PLATING: 30 MICROINCHES GOLD	PLATING: 150 MICROINCHES TIN/LEAD
Wire Accommodation 28 AWG		
Order No. 14-56-3**XX**8 Replace "**XX**" with number of circuits, 02-25	**Order No.** 14-56-4**XX**4 Replace "**XX**" with number of circuits, 02-25	**Order No.** 14-60-1**XX**1 Replace "**XX**" with number of circuits, 02-25
Wire Accommodation 26 AWG		
Order No. 14-56-3**XX**6 Replace "**XX**" with number of circuits, 02-25	**Order No.** 14-56-4**XX**2 Replace "**XX**" with number of circuits, 02-25	**Order No.** 14-60-0**XX**9 Replace "**XX**" with number of circuits, 02-25
Wire Accommodation 24 AWG		
Order No. •14-56-3**XX**5 Replace "**XX**" with number of circuits, 02-25	**Order No.** 14-56-4**XX**0 Replace "**XX**" with number of circuits, 02-25	**Order No.** 14-60-0**XX**7 Replace "**XX**" with number of circuits, 02-25
Wire Accommodation 22 AWG		
Order No. 14-56-7**XX**5 Replace "**XX**" with number of circuits, 02-25	**Order No.** 14-56-8**XX**0 Replace "**XX**" with number of circuits, 02-25	**Order No.** 14-56-7**XX**0 Replace "**XX**" with number of circuits, 02-25

▨ Highlighted area denotes preferred standard product. Usually available with shorter leadtimes.

• U.S. Standard Product, available through Molex franchised distributors.

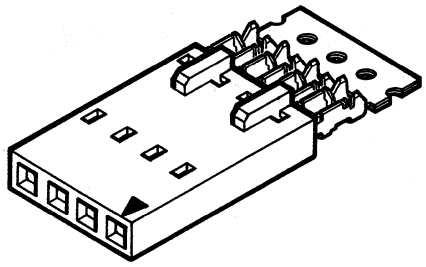
Single Row Female Insulation Displacement Connector Assembly

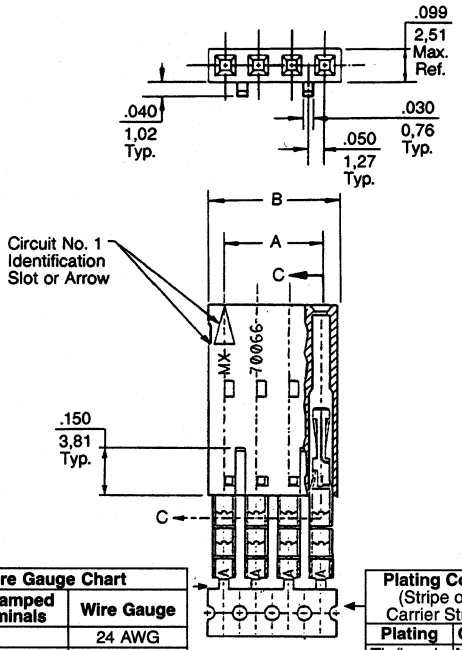
A

70400 Series

"D" Version

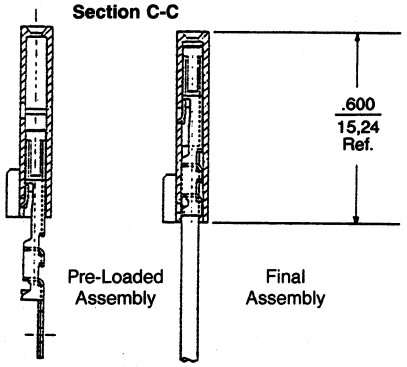
- Pre-loaded, single piece construction allows for fully automated termination
- Packaged in plastic tubes to allow for automated manufacturing and to minimize product handling
- Stackable end-to-end and back-to-back
- Housing "D" Version mates with panel mounts/clips 70004, 70013, 70018, 70022, 70104
- Back ribs maintain position of connector assembly in clips; prevents lateral movement when another assembly is removed.





Rib Location for 2 & 3 Circuit Housing





Wire Gauge Chart	
Code Stamped on Terminals	**Wire Gauge**
A	24 AWG
B	26 AWG
C	28 AWG
D	22 AWG

Plating Code (Stripe on Carrier Strip)	
Plating	**Color**
Tin/Lead	None
15µ" Gold	Yellow
30µ" Gold	Red

Universal Polarizing Pin
Order No.
15-04-0292

NOTE: 2 circuit housings are pre-loaded in pairs.

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.199 5,05	7	.600 15,24	.699 17,75	12	1.100 27,94	1.199 30,45	17	1.600 40,64	1.699 43,15	22	2.100 53,34	2.199 55,85
3	.200 5,08	.299 7,59	8	.700 17,78	.799 20,29	13	1.200 30,48	1.299 32,99	18	1.700 43,18	1.799 45,69	23	2.200 55,88	2.299 58,39
4	.300 7,62	.399 10,13	9	.800 20,32	.899 22,83	14	1.300 33,02	1.399 35,53	19	1.800 45,72	1.899 48,23	24	2.300 58,42	2.399 60,93
5	.400 10,16	.499 12,67	10	.900 22,86	.999 25,37	15	1.400 35,56	1.499 38,07	20	1.900 48,26	1.999 50,77	25	2.400 60,96	2.499 63,47
6	.500 12,70	.599 15,21	11	1.000 25,40	1.099 27,91	16	1.500 38,10	1.599 40,61	21	2.000 50,80	2.099 53,31			

Ordering Information

PLATING: 15 MICROINCHES GOLD	PLATING: 30 MICROINCHES GOLD	PLATING: 150 MICROINCHES TIN/LEAD
Wire Accommodation 28 AWG		
Order No. 14-56-3**XX**9 Replace "**XX**" with number of circuits, 02-25	**Order No.** 14-56-4**XX**5 Replace "**XX**" with number of circuits, 02-25	**Order No.** 14-60-1**XX**2 Replace "**XX**" with number of circuits, 02-25
Wire Accommodation 26 AWG		
Order No. 14-56-3**XX**7 Replace "**XX**" with number of circuits, 02-25	**Order No.** 14-56-4**XX**3 Replace "**XX**" with number of circuits, 02-25	**Order No.** 14-60-1**XX**0 Replace "**XX**" with number of circuits, 02-25
Wire Accommodation 24 AWG		
Order No. • 14-56-3**XX**4 Replace "**XX**" with number of circuits, 02-25	**Order No.** 14-56-4**XX**1 Replace "**XX**" with number of circuits, 02-25	**Order No.** 14-60-0**XX**8 Replace "**XX**" with number of circuits, 02-25
Wire Accommodation 22 AWG		
Order No. 14-56-7**XX**6 Replace "**XX**" with number of circuits, 02-25	**Order No.** 14-56-8**XX**1 Replace "**XX**" with number of circuits, 02-25	**Order No.** 14-56-7**XX**1 Replace "**XX**" with number of circuits, 02-25

Highlighted area denotes preferred standard product. Usually available with shorter leadtimes.

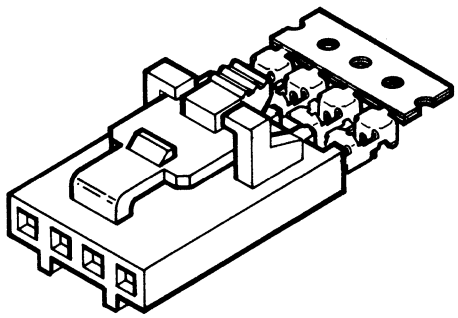
• U.S. Standard Product, available through Molex franchised distributors.

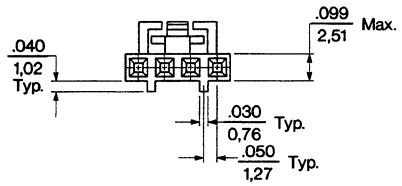
Single Row Female Insulation Displacement Connector Assembly

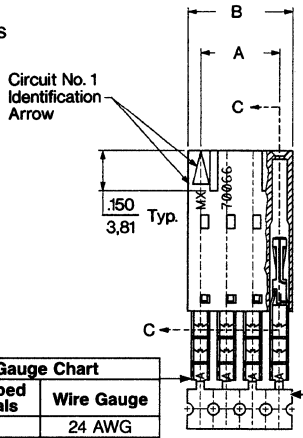
A

70400 Series
"G" Version

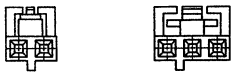
- Pre-loaded, single piece construction allows for fully automated termination
- Packaged in plastic tubes to allow for automated manufacturing and to minimize product handling
- Stackable side-by-side and end-to-end
- Positive latch secures connector to mating part
- Anti-entanglement/overstress ribs prevent discrete wires from catching under latch during harness manufacturing and storage
- Front ribs prevent housing from being twisted off pins
- Housing "G" Version mates with locking headers, clips, and panel mounts 70553, 70555, 70543, 70545, 70107-A, 70107-B, and 70018



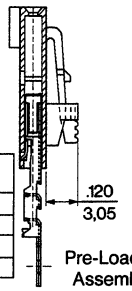




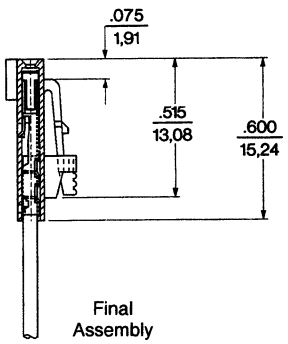
Rib Location for 2 & 3 Circuit Housing



Section C-C



Pre-Loaded Assembly



Final Assembly

Wire Gauge Chart	
Code Stamped on Terminals	**Wire Gauge**
A	24 AWG
B	26 AWG
C	28 AWG
D	22 AWG

Plating Code (Stripe on Carrier Strip)	
Plating	**Color**
Tin/Lead	None
15µ" Gold	Yellow
30µ" Gold	Red

Universal Polarizing Pin
Order No. 15-04-0292

NOTE: 2 circuit housings are pre-loaded in pairs.

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.199 5,05	7	.600 15,24	.699 17,75	12	1.100 27,94	1.199 30,45	17	1.600 40,64	1.699 43,15	22	2.100 53,34	2.199 55,85
3	.200 5,08	.299 7,59	8	.700 17,78	.799 20,29	13	1.200 30,48	1.299 32,99	18	1.700 43,18	1.799 45,69	23	2.200 55,88	2.299 58,39
4	.300 7,62	.399 10,13	9	.800 20,32	.899 22,83	14	1.300 33,02	1.399 35,53	19	1.800 45,72	1.899 48,23	24	2.300 58,42	2.399 60,93
5	.400 10,16	.499 12,67	10	.900 22,86	.999 25,37	15	1.400 35,56	1.499 38,07	20	1.900 48,26	1.999 50,77	25	2.400 60,96	2.499 63,47
6	.500 12,70	.599 15,21	11	1.000 25,40	1.099 27,91	16	1.500 38,10	1.599 40,61	21	2.000 50,80	2.099 53,31			

Ordering Information

Housing "G" Version mates with locking headers, clips and panel mounts

PLATING: 15 MICROINCHES GOLD	PLATING: 30 MICROINCHES GOLD	PLATING: 150 MICROINCHES TIN/LEAD
Wire Accommodation 28 AWG		
Order No. 14-56-2**XX**6	**Order No.** 14-56-3**XX**3	**Order No.** 14-60-0**XX**6
Replace "**XX**" with number of circuits, 02-25	Replace "**XX**" with number of circuits, 02-25	Replace "**XX**" with number of circuits, 02-25
Wire Accommodation 26 AWG		
Order No. 14-56-2**XX**4	**Order No.** 14-56-3**XX**1	**Order No.** 14-60-0**XX**4
Replace "**XX**" with number of circuits, 02-25	Replace "**XX**" with number of circuits, 02-25	Replace "**XX**" with number of circuits, 02-25
Wire Accommodation 24 AWG		
Order No. • 14-56-2**XX**2	**Order No.** 14-56-2**XX**8	**Order No.** 14-60-0**XX**2
Replace "**XX**" with number of circuits, 02-25	Replace "**XX**" with number of circuits, 02-25	Replace "**XX**" with number of circuits, 02-25
Wire Accommodation 22 AWG		
Order No. 14-56-7**XX**7	**Order No.** 14-56-8**XX**2	**Order No.** 14-56-7**XX**2
Replace "**XX**" with number of circuits, 02-25	Replace "**XX**" with number of circuits, 02-25	Replace "**XX**" with number of circuits, 02-25

▨ Highlighted area denotes preferred standard product. Usually available with shorter leadtimes.

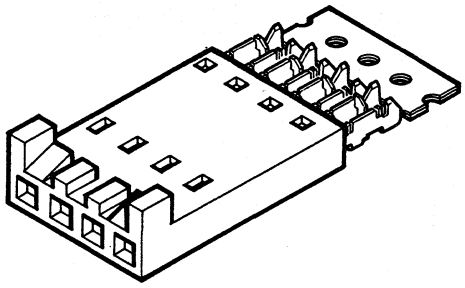
• U.S. Standard Product, available through Molex franchised distributors.

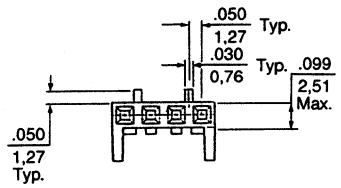
Single Row Female Insulation Displacement Connector Assembly

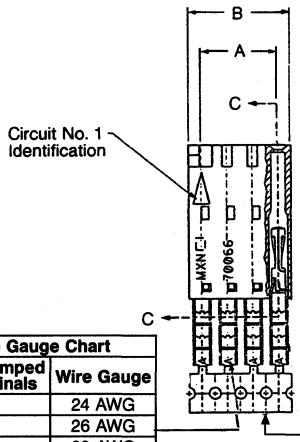
A

70400 Series
"H" Version

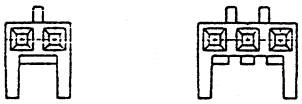
- Pre-loaded, single piece construction allows for fully automated termination
- Packaged in **mylar film on reels** to allow for automated manufacturing and to minimize product handling
- Stackable end-to-end
- Mates with Molex KK Series PCB headers with friction lock, e.g. 6373 & 7478
- Application tooling available AM60570 or AM60550. Tooling used for mylar reels only.
- Version "H" mates with Molex KK Series PCB headers, i.e. 6373 and 7478



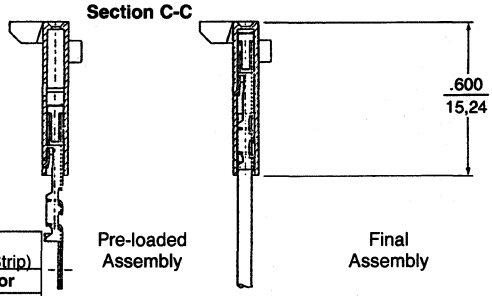




Rib Location for 2 & 3 Circuit Housing



Section C-C



Wire Gauge Chart	
Code Stamped on Terminals	**Wire Gauge**
A	24 AWG
B	26 AWG
C	28 AWG
D	22 AWG

Plating Code (Stripe on Carrier Strip)	
Plating	**Color**
Tin/Lead	None
15µ" Gold	Yellow
30µ" Gold	Red

Universal Polarizing Pin
Order No.
15-04-0292

NOTE: 2 circuit housings are pre-loaded in pairs.

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.199 5,05	7	.600 15,24	.699 17,75	12	1.100 27,94	1.199 30,45	17	1.600 40,64	1.699 43,15	22	2.100 53,34	2.199 55,85
3	.200 5,08	.299 7,59	8	.700 17,78	.799 20,29	13	1.200 30,48	1.299 32,99	18	1.700 43,18	1.799 45,69	23	2.200 55,88	2.299 58,39
4	.300 7,62	.399 10,13	9	.800 20,32	.899 22,83	14	1.300 33,02	1.399 35,53	19	1.800 45,72	1.899 48,23	24	2.300 58,42	2.399 60,93
5	.400 10,16	.499 12,67	10	.900 22,86	.999 25,37	15	1.400 35,56	1.499 38,07	20	1.900 48,26	1.999 50,77	25	2.400 60,96	2.499 63,47
6	.500 12,70	.599 15,21	11	1.000 25,40	1.099 27,91	16	1.500 38,10	1.599 40,61	21	2.000 50,80	2.099 53,31			

Ordering Information

Connector Version "H" mates with Molex KK Series PCB Headers, e.g. 6373 and 7478

PLATING: 15 MICROINCHES GOLD	PLATING: 30 MICROINCHES GOLD	PLATING: 150 MICROINCHES TIN/LEAD
Wire Accommodation 28 AWG		
Order No. 14-60-1**XX**9	**Order No.** 14-60-2**XX**2	**Order No.** 14-60-1**XX**7
Replace "**XX**" with number of circuits, 02-25	Replace "**XX**" with number of circuits, 02-25	Replace "**XX**" with number of circuits, 02-25
Wire Accommodation 26 AWG		
Order No. 14-60-1**XX**8	**Order No.** 14-60-2**XX**1	**Order No.** 14-60-1**XX**6
Replace "**XX**" with number of circuits, 02-25	Replace "**XX**" with number of circuits, 02-25	Replace "**XX**" with number of circuits, 02-25
Wire Accommodation 24 AWG		
Order No. • 14-56-6**XX**8	**Order No.** 14-60-2**XX**0	**Order No.** 14-60-1**XX**3
Replace "**XX**" with number of circuits, 02-25	Replace "**XX**" with number of circuits, 02-25	Replace "**XX**" with number of circuits, 02-25
Wire Accommodation 22 AWG		
Order No. 14-56-7**XX**8	**Order No.** 14-56-8**XX**3	**Order No.** 14-56-7**XX**3
Replace "**XX**" with number of circuits, 02-25	Replace "**XX**" with number of circuits, 02-25	Replace "**XX**" with number of circuits, 02-25

▨ Highlighted area denotes preferred standard product. Usually available with shorter leadtimes.

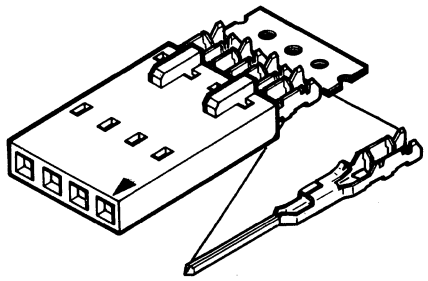
• U.S. Standard Product, available through Molex franchised distributors.

Specifications for Single Row Male IDT Connectors

A

Male Insulation Displacement Connector Assembly

This specification covers the insulation displacement terminal, engineering series 70110 preassembled into housing 70066, becoming assembly 70475.



Shown: 70475 "D" Version Connector

Material:

Housing - 94V-0 glass filled polyester, black

Terminal - Phosphor bronze

Electrical:

Contact Resistance at Rated Current - 5 milliohms

Insulation Resistance - 10,000 megohms

Dielectric Strength - 600 VAC r.m.s. for 1 minute at sea level to 5,000 ft.

Current Ratings -
28 AWG 1.2A
26 AWG 1.8A
24 AWG 3.0A
22 AWG 3.0A

Platings:

No. 1 - 15 µ in. min. gold in select area over 50 µ in. min. nickel overall, with 75 µ in. min. electro-tin/lead in select area.

No. 2 - 30 µ in. min. gold in select area over 50 µ in. min. nickel plate overall, with 75 µ in. electro-tin/lead in select area.

No. 3 - 150 µ in. tin/lead over 50 µ in. nickel overall.

Environmental:

Operating Temperature Range - -40°c to 105°C

Mechanical:

Pin Height - Max: .300"
Min: .280" (from top of housing to top of pin)

Wire Range - Accepts wire range from 28 to 22 AWG stranded, with .053" max. outside diameter

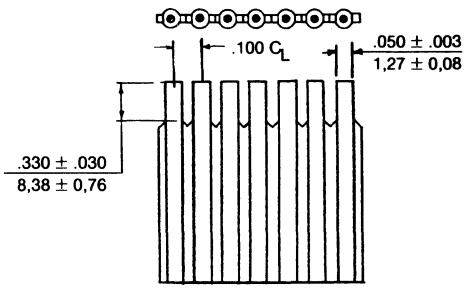
Terminal Pullout Force from housing - Will withstand gradual applied force of 4 lbs. for 15 seconds

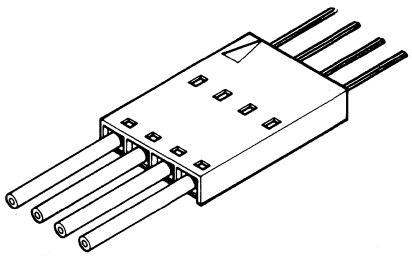
UL listed, CSA certified

Recommended Molex Cable Eng. Nos. to use with 70400 Series connectors:

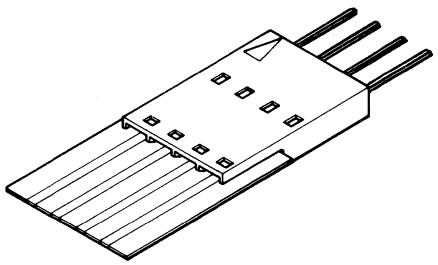
7307	8996
24241	8997
24226	24369
7767	24389

Notching Specification for Ribbon Cable

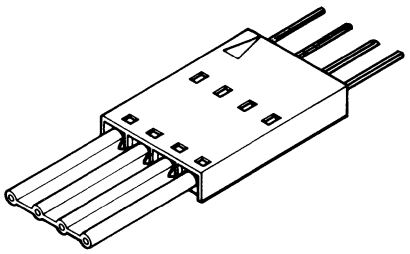




Discrete Wire
Section A, this catalog



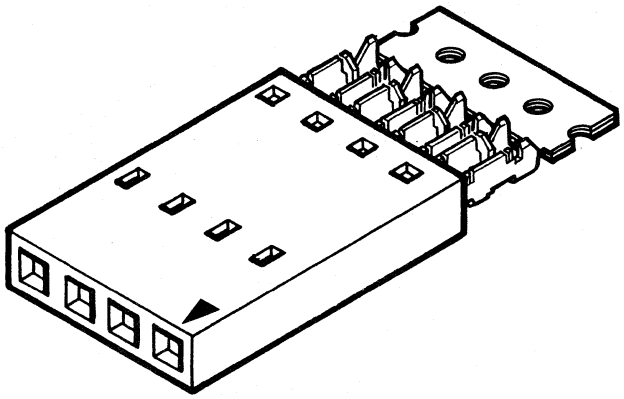
Flat Flex Cable
Section G, this catalog

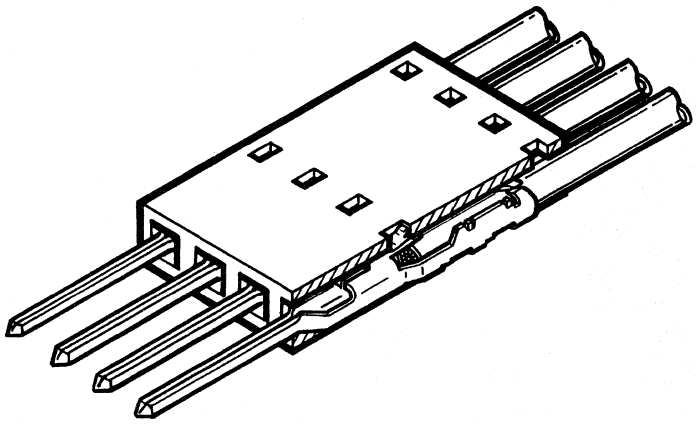


Ribbon Cable
Section G, this catalog

Single Row Male Insulation Displacement Connector Assembly

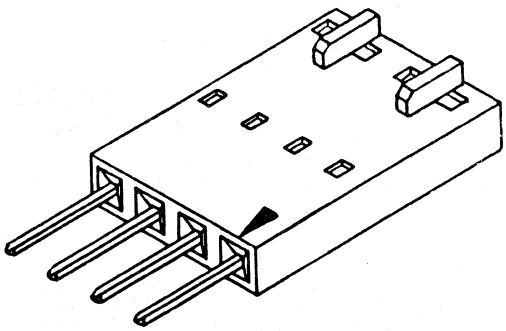
A



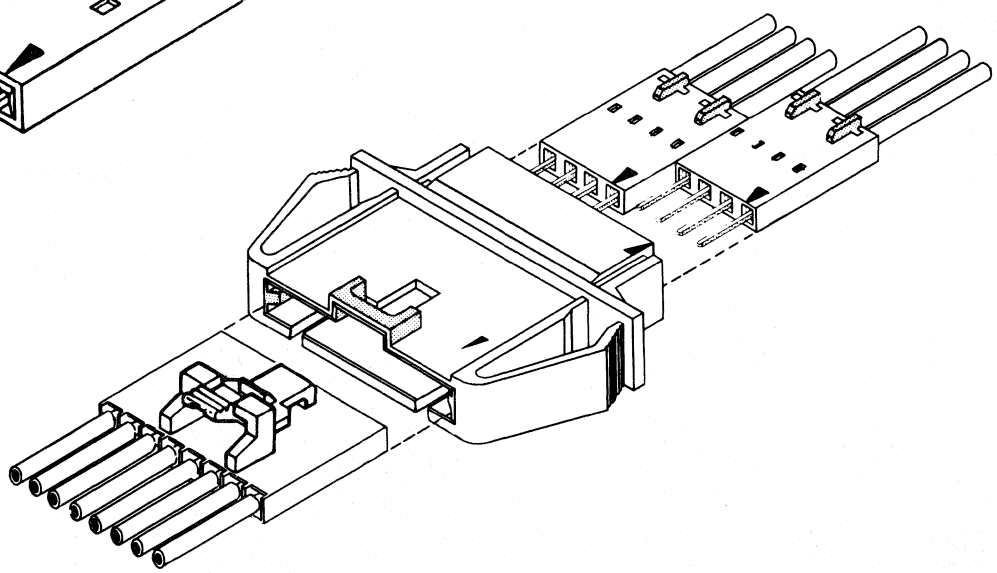


In preloaded form, the male and female IDT assemblies are identical. The carrier is color coded to identify the plating and is stamped with a letter to distinguish male from female.

Application equipment is described in Section M.



"D" Version



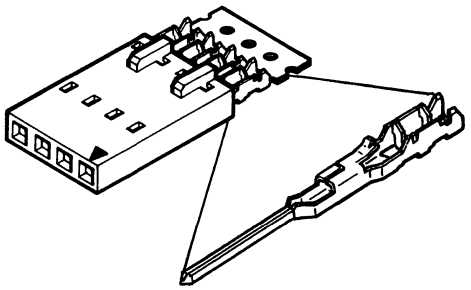
Modularity permits gang loading of subassemblies. In this case, two "D" option male assemblies are connected to a "G" option female assembly.

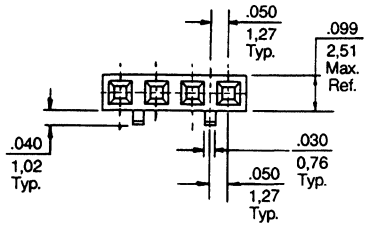
Male Insulation Displacement Connector Assembly

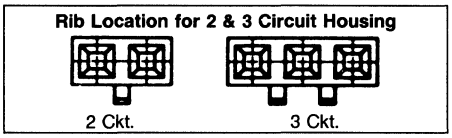
A

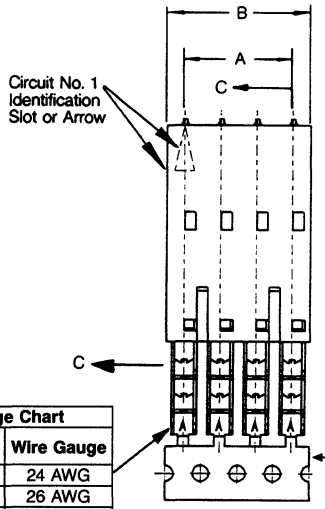
70475 Series
"D" Version

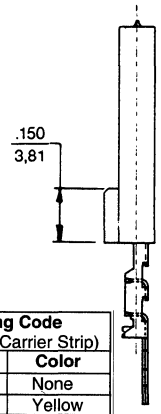
- Pre-loaded, single piece construction allows for fully automated termination
- Packaged in plastic tubes to allow for automated manufacturing and to minimize product handling
- Stackable end-to-end and back-to-back
- Version "D" mates with interim clips or panel mounts 70018, 70104, 70022
- Back ribs maintain position of connector assembly in clips; prevents lateral movement when another assembly is removed.





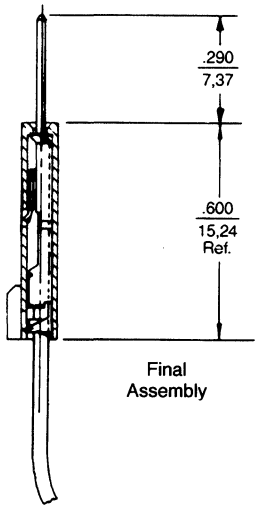






Pre-Loaded Assembly

Section C-C



Final Assembly

Wire Gauge Chart	
Code Stamped on Terminals	Wire Gauge
A	24 AWG
B	26 AWG
C	28 AWG
D	22 AWG

Plating Code (Stripe on Carrier Strip)	
Plating	Color
Tin/Lead	None
15µ" Gold	Yellow
30µ" Gold	Red

NOTE: 2 circuit housings are pre-loaded in pairs.

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.199 5,05	7	.600 15,24	.699 17,75	12	1.100 27,94	1.199 30,45	17	1.600 40,64	1.699 43,15	22	2.100 53,34	2.199 55,85
3	.200 5,08	.299 7,59	8	.700 17,78	.799 20,29	13	1.200 30,48	1.299 32,99	18	1.700 43,18	1.799 45,69	23	2.200 55,88	2.299 58,39
4	.300 7,62	.399 10,13	9	.800 20,32	.899 22,83	14	1.300 33,02	1.399 35,53	19	1.800 45,72	1.899 48,23	24	2.300 58,42	2.399 60,93
5	.400 10,16	.499 12,67	10	.900 22,86	.999 25,37	15	1.400 35,56	1.499 38,07	20	1.900 48,26	1.999 50,77	25	2.400 60,96	2.499 63,47
6	.500 12,70	.599 15,21	11	1.000 25,40	1.099 27,91	16	1.500 38,10	1.599 40,61	21	2.000 50,80	2.099 53,31			

Ordering Information

Housing "D" Version mates with female connectors in interim clips or panel mounts

PLATING: 15 MICROINCHES GOLD	PLATING: 30 MICROINCHES GOLD	PLATING: 150 MICROINCHES TIN/LEAD
Wire Accommodation 28 AWG		
Order No. 14-44-21**XX** Replace "**XX**" with number of circuits, 02-25	**Order No.** 14-44-49**XX** Replace "**XX**" with number of circuits, 02-25	**Order No.** 14-45-18XX Replace "**XX**" with number of circuits, 02-25
Wire Accommodation 26 AWG		
Order No. 14-44-16**XX** Replace "**XX**" with number of circuits, 02-25	**Order No.** 14-44-29**XX** Replace "**XX**" with number of circuits, 02-25	**Order No.** 14-45-06**XX** Replace "**XX**" with number of circuits, 02-25
Wire Accommodation 24 AWG		
Order No. • 14-44-12**XX** Replace "**XX**" with number of circuits, 02-25	**Order No.** 14-44-25**XX** Replace "**XX**" with number of circuits, 02-25	**Order No.** 14-45-02**XX** Replace "**XX**" with number of circuits, 02-25
Wire Accommodation 22 AWG		
Order No. 14-44-53**XX** Replace "**XX**" with number of circuits, 02-25	**Order No.** 14-44-54**XX** Replace "**XX**" with number of circuits, 02-25	**Order No.** 14-44-52**XX** Replace "**XX**" with number of circuits, 02-25

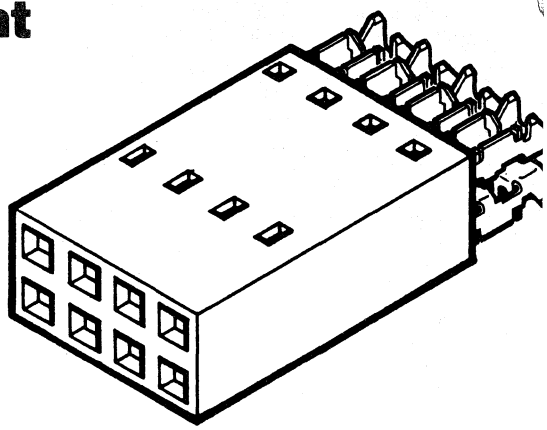
▩ Highlighted area denotes preferred standard product. Usually available with shorter leadtimes.

• U.S. Standard Product, available through Molex franchised distributors.

Specifications for Dual Row Female IDT Connectors

A

Female Insulation Displacement Connector Assembly



This specification covers insulation displacement terminal, engineering series 70028, preassembled into housing 70450, becoming assembly 70451.

Material:

Housing - 94V-0 glass filled polyester, black

Terminal - Phosphor bronze

Electrical:

Contact Resistance - Less than 15 milliohms

Insulation Resistance - 10,000 megohms

Dielectric Strength - 600 VAC r.m.s. for 1 minute at sea level to 5,000 ft.

Current Ratings -
28 AWG 1.2A
26 AWG 1.8A
24 AWG 3.0A
22 AWG 3.0A

Capacitance - <1.2 picofarads

Platings:

No. 1 - 15 µ in. min. gold in select area over 50 µ in. min. nickel overall, with 75 µ in. min. electro-tin/lead in select area.

No. 2 - 30 µ in. min. gold in select area over 50 µ in. min. nickel plate overall, with 75 µ in. electro-tin/lead in select area.

No. 3 - 150 µ in. tin/lead over 50 µ in. nickel overall.

Environmental:

Operating Temperature Range - -40°c to 105°C

Mechanical:

Pin Height - Max: .320"; Min: .200" (measured from top of housing or P.C. board to top of pin)

Wire Range - Accepts discrete wire range from 28 to 22 AWG stranded, with .053" max. outside insulation diameter - **discrete wire only**

Terminal Pullout Force from housing - Will withstand gradual applied force of 4 lbs. for 15 seconds

Insertion/Withdrawal Forces (individual contact)-
8.0 oz. max. insertion
1.0 oz. min. withdrawal

UL listed, CSA certified

Recommended Molex Cable Eng. Nos. to use with 70400 Series connectors:

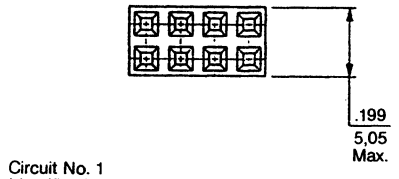
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24226	24369
7767	24389

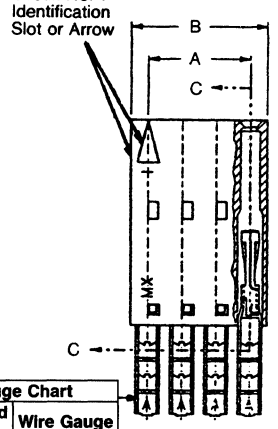
Dual Row Female Insulation Displacement Connector

70451 Series

"A" Version

- End-to-end and side-by-side stackable on .100" grid
- Mates with Molex dual row headers 8723, 8724, 70206, 70203 and 8624; Also mates with Molex Interim Clip 70013 and ribbon cable style headers (MX50)
- Circuit sizes 4-54



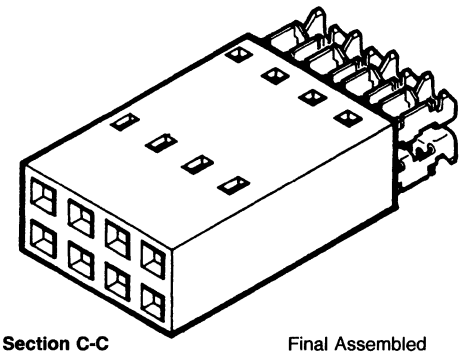


Wire Gauge Chart	
Code Stamped on Terminals	Wire Gauge
A	24 AWG
B	26 AWG
C	28 AWG
D	22 AWG

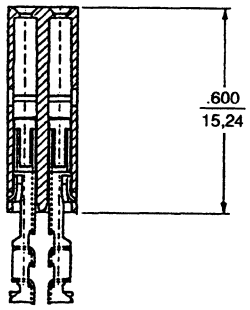
Pre-Loaded Assembly



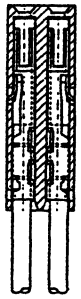
Universal Polarizing Pin
Order No. 15-04-0292



Section C-C



Final Assembled Position



Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.100 2,54	.199 5,05	16	.700 17,78	.799 20,29	26	1.200 30,48	1.299 32,99	36	1.700 43,18	1.799 45,69	46	2.200 55,88	2,299 58,39
6	.200 5,08	.299 7,59	18	.800 20,32	.899 22,83	28	1.300 33,02	1.399 35,53	38	1.800 45,72	1.899 48,23	48	2.300 58,42	2,399 60,93
8	.300 7,62	.399 10,13	20	.900 22,86	.999 25,37	30	1.400 35,56	1.499 38,07	40	1.900 48,26	1.999 50,77	50	2.400 60,96	2,499 63,47
10	.400 10,16	.499 12,67	22	1.000 25,40	1.099 27,91	32	1.500 38,10	1.599 40,61	42	2.000 50,80	2.099 53,31	52	2.500 63,50	2,599 66,01
12	.500 12,70	.599 15,21	24	1.100 27,94	1.199 30,45	34	1.600 40,64	1.699 43,15	44	2.100 53,34	2.199 55,85	54	2.600 66,04	2,699 68,55
14	.600 15,24	.699 17,75												

Ordering Information

PLATING: 15 MICROINCHES GOLD	PLATING: 30 MICROINCHES GOLD	PLATING: 150 MICROINCHES TIN/LEAD
Wire Accommodation 28 AWG		
Order No. 14-56-5**XX**5 Replace "**XX**" with number of circuits, 04-54 (even number only)	**Order No.** 14-56-6**XX**4 Replace "**XX**" with number of circuits, 04-54 (even number only)	**Order No.** 14-56-4**XX**6 Replace "**XX**" with number of circuits, 04-54 (even number only)
Wire Accommodation 26 AWG		
Order No. 14-56-5**XX**2 Replace "**XX**" with number of circuits, 04-54 (even number only)	**Order No.** 14-56-6**XX**1 Replace "**XX**" with number of circuits, 04-54 (even number only)	**Order No.** 14-55-2**XX**7 Replace "**XX**" with number of circuits, 04-54 (even number only)
Wire Accommodation 24 AWG		
Order No. • 14-56-4**XX**9 Replace "**XX**" with number of circuits, 04-54 (even number only)	**Order No.** 14-56-5**XX**8 Replace "**XX**" with number of circuits, 04-54 (even number only)	**Order No.** 14-55-2**XX**4 Replace "**XX**" with number of circuits, 04-54 (even number only)
Wire Accommodation 22 AWG		
Order No. 14-57-2**XX**6 Replace "**XX**" with number of circuits, 08-54 (even number only)	**Order No.** 14-57-4**XX**1 Replace "**XX**" with number of circuits, 04-54 (even number only)	**Order No.** 14-57-1**XX**0 Replace "**XX**" with number of circuits, 04-54 (even number only)

Highlighted area denotes preferred standard product. Usually available with shorter leadtimes.

• U.S. Standard Product, available through Molex franchised distributors.

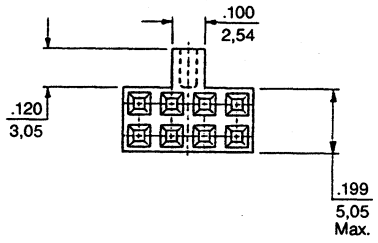
Dual Row Female Insulation Displacement Connector

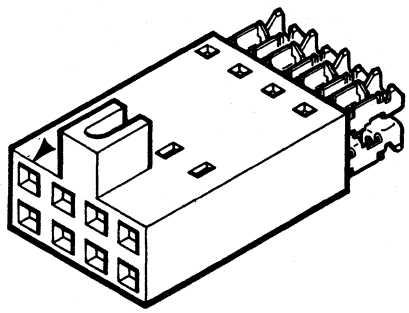
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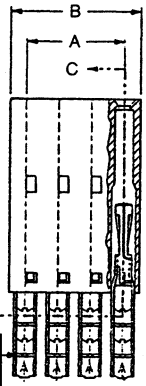
70451 Series

"B" Version

- Polarized
- End-to-end stackable
- Mates with Molex dual row ribbon cable style headers (MX50) without latches, "A" style
- Circuit sizes 4-54

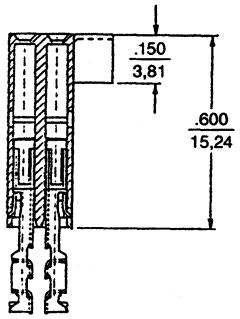




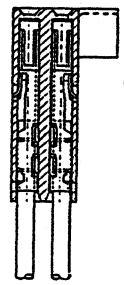


Pre-Loaded Assembly

Section C-C



Final Assembled Position



Wire Gauge Chart	
Code Stamped on Terminals	Wire Gauge
A	24 AWG
B	26 AWG
C	28 AWG
D	22 AWG



Universal Polarizing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.100 2,54	.199 5,05	16	.700 17,78	.799 20,29	26	1.200 30,48	1.299 32,99	36	1.700 43,18	1.799 45,69	46	2.200 55,88	2.299 58,39
6	.200 5,08	.299 7,59	18	.800 20,32	.899 22,83	28	1.300 33,02	1.399 35,53	38	1.800 45,72	1.899 48,23	48	2.300 58,42	2.399 60,93
8	.300 7,62	.399 10,13	20	.900 22,86	.999 25,37	30	1.400 35,56	1.499 38,07	40	1.900 48,26	1.999 50,77	50	2.400 60,96	2.499 63,47
10	.400 10,16	.499 12,67	22	1.000 25,40	1.099 27,91	32	1.500 38,10	1.599 40,61	42	2.000 50,80	2.099 53,31	52	2.500 63,50	2.599 66,01
12	.500 12,70	.599 15,21	24	1.100 27,94	1.199 30,45	34	1.600 40,64	1.699 43,15	44	2.100 53,34	2.199 55,85	54	2.600 66,04	2.699 68,55
14	.600 15,24	.699 17,75												

Ordering Information

PLATING: 15 MICROINCHES GOLD	PLATING: 30 MICROINCHES GOLD	PLATING: 150 MICROINCHES TIN/LEAD
Wire Accommodation 28 AWG		
Order No. 14-56-5**XX**6 Replace "**XX**" with number of circuits, 04-54 (even numbers only)	**Order No.** 14-56-6**XX**5 Replace "**XX**" with number of circuits, 04-54 (even numbers only)	**Order No.** 14-56-4**XX**7 Replace "**XX**" with number of circuits, 04-54 (even numbers only)
Wire Accommodation 26 AWG		
Order No. 14-56-5**XX**3 Replace "**XX**" with number of circuits, 04-54 (even numbers only)	**Order No.** 14-56-6**XX**2 Replace "**XX**" with number of circuits, 04-54 (even numbers only)	**Order No.** 14-55-2**XX**8 Replace "**XX**" with number of circuits, 04-54 (even numbers only)
Wire Accommodation 24 AWG		
Order No. • 14-56-5**XX**0 Replace "**XX**" with nuumber of circuits, 04-54 (even numbers only)	**Order No.** 14-56-5**XX**9 Replace "**XX**" with number of circuits, 04-54 (even numbers only)	**Order No.** 14-55-2**XX**5 Replace "**XX**" with number of circuits, 04-54 (even numbers only)
Wire Accommodation 22 AWG		
Order No. 14-57-2**XX**7 Replace "**XX**" with number of circuits, 04-54 (even numbers only)	**Order No.** 14-57-4**XX**2 Replace "**XX**" with number of circuits, 04-54 (even numbers only)	**Order No.** 14-57-1**XX**1 Replace "**XX**" with number of circuits, 04-54 (even numbers only)

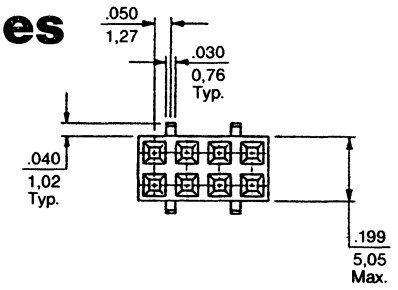
Highlighted area denotes preferred standard product. Usually available with shorter leadtimes.

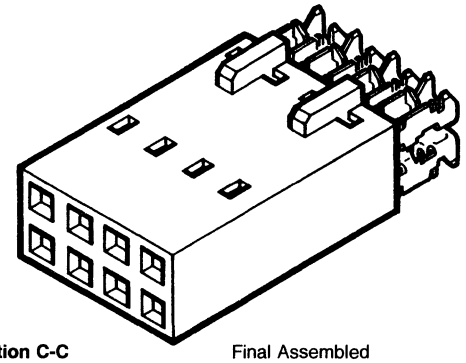
• U.S. Standard Product, available through Molex franchised distributors

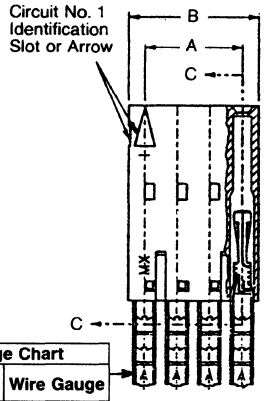
Dual Row Female Insulation Displacement Connector

70451 Series
"C" Version

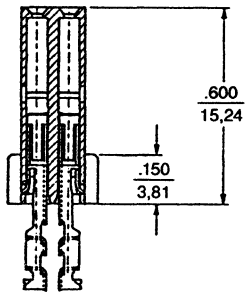
- Designed to be used with 70013 dual row interim clip
- Back ribs maintain position of connector housings in clips; prevents lateral movement when another housing is removed
- End-to-end stackable



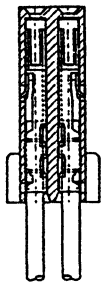




Section C-C



Final Assembled Position



Wire Gauge Chart	
Code Stamped on Terminals	Wire Gauge
A	24 AWG
B	26 AWG
C	28 AWG
D	22 AWG

Pre-Loaded Assembly



Universal Polarzing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.100 2,54	.199 5,05	16	.700 17,78	.799 20,29	26	1.200 30,48	1.299 32,99	36	1.700 43,18	1.799 45,69	46	2.200 55,88	2.299 58,39
6	.200 5,08	.299 7,59	18	.800 20,32	.899 22,83	28	1.300 33,02	1.399 35,53	38	1.800 45,72	1.899 48,23	48	2.300 58,42	2.399 60,93
8	.300 7,62	.399 10,13	20	.900 22,86	.999 25,37	30	1.400 35,56	1.499 38,07	40	1.900 48,26	1.999 50,77	50	2.400 60,96	2.499 63,47
10	.400 10,16	.499 12,67	22	1.000 25,40	1.099 27,91	32	1.500 38,10	1.599 40,61	42	2.000 50,80	2.099 53,31	52	2.500 63,50	2.599 66,01
12	.500 12,70	.599 15,21	24	1.100 27,94	1.199 30,45	34	1.600 40,64	1.699 43,15	44	2.100 53,34	2.199 55,85	54	2.600 66,04	2.699 68,55
14	.600 15,24	.699 17,75												

Ordering Information

PLATING: 15 MICROINCHES GOLD	PLATING: 30 MICROINCHES GOLD	PLATING: 150 MICROINCHES TIN/LEAD
Wire Accommodation 28 AWG		
Order No. 14-56-5**XX**7 Replace "**XX**" with number of circuits, 04-54 (even numbers only)	**Order No.** 14-56-6**XX**6 Replace "**XX**" with number of circuits, 04-54 (even numbers only)	**Order No.** 14-56-4**XX**8 Replace "**XX**" with number of circuits, 04-54 (even numbers only)
Wire Accommodation 26 AWG		
Order No. 14-56-5**XX**4 Replace "**XX**" with number of circuits, 04-54 (even numbers only)	**Order No.** 14-56-6**XX**3 Replace "**XX**" with number of circuits, 04-54 (even numbers only)	**Order No.** 14-55-2**XX**9 Replace "**XX**" with number of circuits, 04-54 (even numbers only)
Wire Accomodation 24 AWG		
Order No. • 14-56-5**XX**1 Replace "**XX**" with number of circuits, 04-54 (even numbers only)	**Order No.** 14-56-6**XX**0 Replace "**XX**" with number of circuits, 04-54 (even numbers only)	**Order No.** 14-55-2**XX**6 Replace "**XX**" with number of circuits, 04-54 (even numbers only)
Wire Accommodation 22 AWG		
Order No. 14-57-2**XX**8 Replace "**XX**" with number of circuits, 04-54 (even numbers only)	**Order No.** 14-57-4**XX**3 Replace "**XX**" with number of circuits, 04-54 (even numbers only)	**Order No.** 14-57-1**XX**2 Replace "**XX**" with number of circuits, 04-54 (even numbers only)

▒ Highlighted area denotes preferred standard product. Usually available with shorter leadtimes.

• U.S. Standard Product, available through Molex franchised distributors.

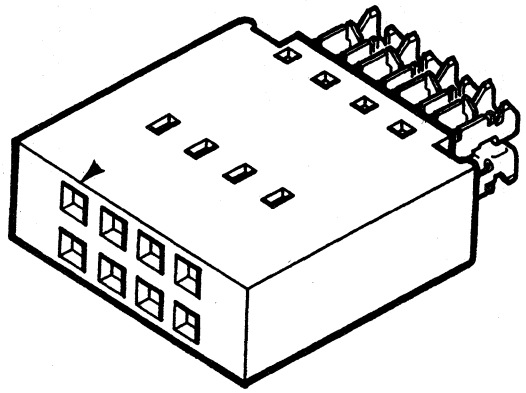
Dual Row Female Insulation Displacement Connector

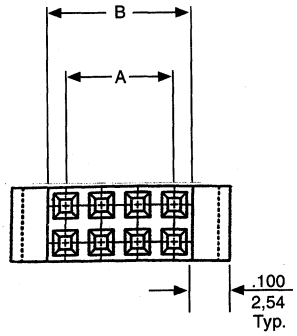
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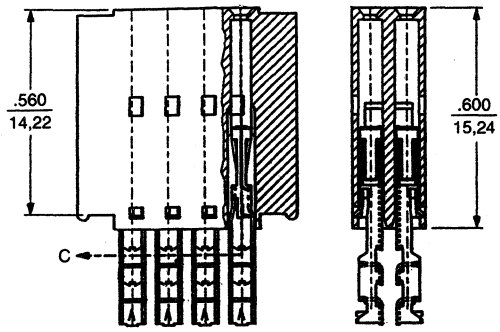
70451 Series

"D" Version

- Side-by-side stackable
- Mates with Molex dual row ribbon cable style headers (MX50) with long latch/eject levers, style "C"
- Circuit sizes 4-50







Pre-Loaded Assembly

Section C-C



Universal Polarzing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.100 2,54	.199 5,05	14	.600 15,24	.699 17,75	24	1.100 27,94	1.199 30,45	34	1.600 40,64	1.699 43,15	44	2.100 53,34	2.199 55,85
6	.200 5,08	.299 7,59	16	.700 17,78	.799 20,29	26	1.200 30,48	1.299 32,99	36	1.700 43,18	1.799 45,69	46	2.200 55,88	2.299 58,39
8	.300 7,62	.399 10,13	18	.800 20,32	.899 22,83	28	1.300 33,02	1.399 35,53	38	1.800 45,72	1.899 48,32	48	2.300 58,42	2.399 60,93
10	.400 10,16	.499 12,67	20	.900 22,86	.999 25,37	30	1.400 35,56	1.499 38,07	40	1.900 48,26	1.999 50,77	50	2.400 60,96	2.499 63,47
12	.500 12,70	.599 15,21	22	1.000 25,40	1.099 27,91	32	1.500 38,10	1.599 40,61	42	2.000 50,80	2.099 53,31			

Ordering Information

PLATING: 15 MICROINCHES GOLD	PLATING: 30 MICROINCHES GOLD	PLATING: 150 MICROINCHES TIN/LEAD
Wire Accommodation 28 AWG		
Order No. 14-57-3**XX**8 Replace "**XX**" with number of circuits, 04-50 (even numbers only)	**Order No.** 14-57-5**XX**3 Replace "**XX**" with number of circuits, 04-50 (even numbers only)	**Order No.** 14-57-2**XX**3 Replace "**XX**" with number of circuits, 04-50 (even numbers only)
Wire Accommodation 26 AWG		
Order No. 14-57-3**XX**5 Replace "**XX**" with number of circuits, 04-50 (even numbers only)	**Order No.** 14-57-5**XX**0 Replace "**XX**" with number of circuits, 04-50 (even numbers only)	**Order No.** 14-57-1**XX**9 Replace "**XX**" with number of circuits, 04-50 (even numbers only)
Wire Accomodation 24 AWG		
Order No. • 14-57-3**XX**2 Replace "**XX**" with number of circuits, 04-50 (even numbers only)	**Order No.** 14-57-4**XX**7 Replace "**XX**" with number of circuits, 04-50 (even numbers only)	**Order No.** 14-57-1**XX**6 Replace "**XX**" with number of circuits, 04-50 (even numbers only)
Wire Accommodation 22 AWG		
Order No. 14-57-2**XX**9 Replace "**XX**" with number of circuits, 04-50 (even numbers only)	**Order No.** 14-57-4**XX**4 Replace "**XX**" with number of circuits, 04-50 (even numbers only)	**Order No.** 14-57-1**XX**3 Replace "**XX**" with number of circuits, 04-50 (even numbers only)

▒ Highlighted area denotes preferred standard product. Usually available with shorter leadtimes.

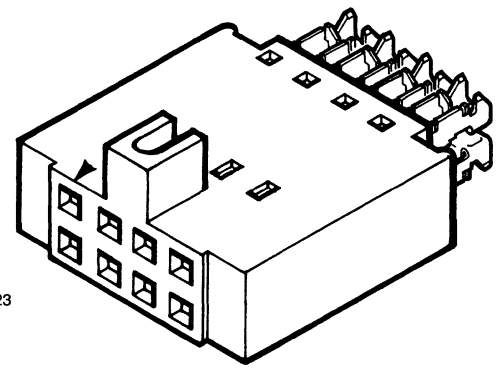
• U.S. Standard Product, available through Molex franchised distributors

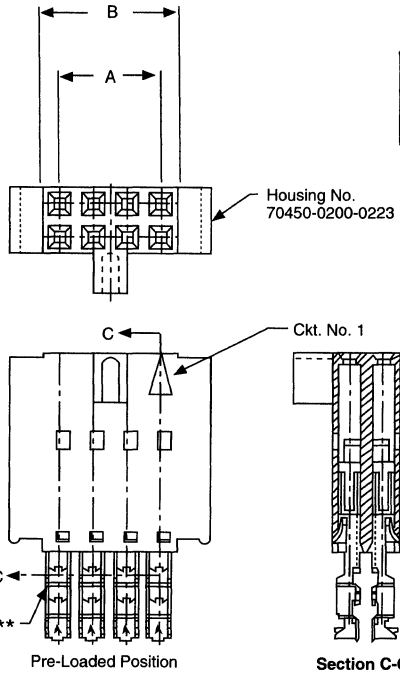
Dual Row Female Insulation Displacement Connector

A

70451 Series
"E" Version

- Polarized
- Mates with Molex dual row ribbon cable style headers (MX50) with long latch/eject levers, style "C"
- Circuit sizes 4-50





Wire Gauge Chart	
Code Stamped on Terminals	Wire Gauge
A	24 AWG
B	26 AWG
C	28 AWG
D	22 AWG

Universal Polarizing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.100 2,54	.199 5,05	14	.600 15,24	.699 17,75	24	1.100 27,94	1.199 30,45	34	1.600 40,64	1.699 43,15	44	2.100 53,34	2.199 55,85
6	.200 5,08	.299 7,59	16	.700 17,78	.799 20,29	26	1.200 30,48	1.299 32,99	36	1.700 43,18	1.799 45,69	46	2.200 55,88	2.299 58,39
8	.300 7,62	.399 10,13	18	.800 20,32	.899 22,83	28	1.300 33,02	1.399 35,53	38	1.800 45,72	1.899 48,23	48	2.300 58,42	2.399 60,93
10	.400 10,16	.499 12,67	20	.900 22,86	.999 25,37	30	1.400 35,56	1.499 38,07	40	1.900 48,26	1.999 50,77	50	2.400 60,96	2.499 63,47
12	.500 12,70	.599 15,21	22	1.000 25,40	1.099 27,91	32	1.500 38,10	1.599 40,61	42	2.000 50,80	2.099 53,31			

Ordering Information

PLATING: 15 MICROINCHES GOLD	PLATING: 30 MICROINCHES GOLD	PLATING: 150 MICROINCHES TIN/LEAD
Wire Accommodation 28 AWG		
Order No. 14-57-3**XX**9 Replace "**XX**" with number of circuits, 04-54 (even numbers only)	**Order No.** 14-57-5**XX**4 Replace "**XX**" with number of circuits, 04-54 (even numbers only)	**Order No.** 14-57-2**XX**4 Replace "**XX**" with number of circuits, 04-54 (even numbers only)
Wire Accommodation 26 AWG		
Order No. 14-57-3**XX**6 Replace "**XX**" with number of circuits, 04-54 (even numbers only)	**Order No.** 14-57-5**XX**1 Replace "**XX**" with number of circuits, 04-54 (even numbers only)	**Order No.** 14-57-2**XX**1 Replace "**XX**" with number of circuits, 04-54 (even numbers only)
Wire Accommodation 24 AWG		
Order No. • 14-57-3**XX**3 Replace "**XX**" with number of circuits, 04-54 (even numbers only)	**Order No.** 14-57-4**XX**8 Replace "**XX**" with number of circuits, 04-54 (even numbers only)	**Order No.** 14-57-1**XX**7 Replace "**XX**" with number of circuits, 04-54 (even numbers only)
Wire Accommodation 22 AWG		
Order No. 14-57-3**XX**0 Replace "**XX**" with number of circuits, 04-54 (even numbers only)	**Order No.** 14-57-4**XX**5 Replace "**XX**" with number of circuits, 04-54 (even numbers only)	**Order No.** 14-57-1**XX**4 Replace "**XX**" with number of circuits, 04-54 (even numbers only)

Highlighted area denotes preferred standard product. Usually available with shorter leadtimes.

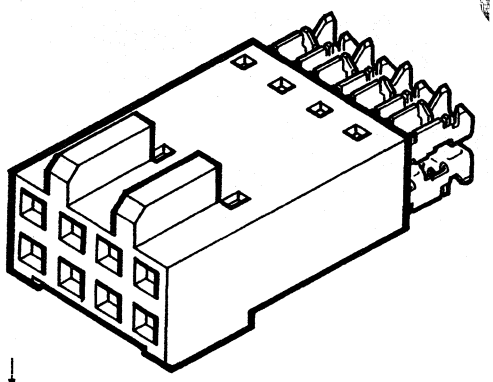
• U.S. Standard Product, available through Molex franchised distributors.

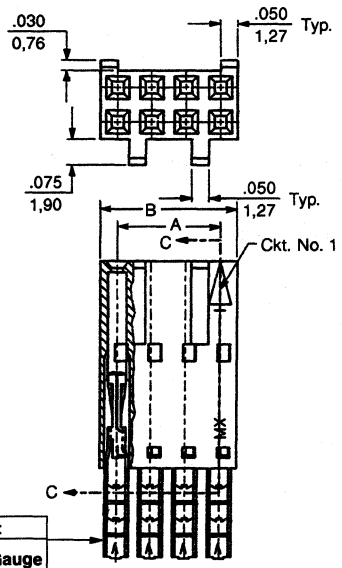
Dual Row Female Insulation Displacement Connector

A

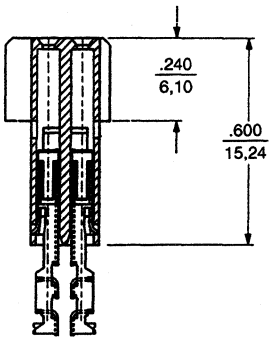
70451 Series
"F" Version

- Polarized
- End-to-end stackable
- Mates with Molex dual row headers 8723, 8724
- Circuit sizes 4-54





Pre-Loaded Assembly



Section C-C

Wire Gauge Chart	
Code Stamped on Terminals	Wire Gauge
A	24 AWG
B	26 AWG
C	28 AWG
D	22 AWG

Universal Polarzing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.100 2,54	.199 5,05	16	.700 17,78	.799 20,29	26	1.200 30,48	1.299 32,99	36	1.700 43,18	1.799 45,69	46	2.200 55,88	2.299 58,39
6	.200 5,08	.299 7,59	18	.800 20,32	.899 22,83	28	1.300 33,02	1.399 35,53	38	1.800 45,72	1.899 48,23	48	2.300 58,42	2.399 60,93
8	.300 7,62	.399 10,13	20	.900 22,86	.999 25,37	30	1.400 35,56	1.499 38,07	40	1.900 48,26	1.999 50,77	50	2.400 60,96	2.499 63,47
10	.400 10,16	.499 12,67	22	1.000 25,40	1.099 27,91	32	1.500 38,10	1.599 40,61	42	2.000 50,80	2.099 53,31	52	2.500 63,50	2.599 66,01
12	.500 12,70	.599 15,21	24	1.100 27,94	1.199 30,45	34	1.600 40,64	1.699 43,15	44	2.100 53,34	2.199 55,85	54	2.600 66,04	2.699 68,55
14	.600 15,24	.699 17,75												

Ordering Information

PLATING: 15 MICROINCHES GOLD	PLATING: 30 MICROINCHES GOLD	PLATING: 150 MICROINCHES TIN/LEAD
Wire Accommodation 28 AWG		
Order No. 14-57-4**XX**0 Replace "**XX**" with number of circuits, 08-54 (even numbers only)	**Order No.** 14-57-5**XX**5 Replace "**XX**" with number of circuits, 08-54 (even numbers only)	**Order No.** 14-57-2**XX**5 Replace "**XX**" with number of circuits, 08-54 (even numbers only)
Wire Accommodation 26 AWG		
Order No. 14-57-3**XX**7 Replace "**XX**" with number of circuits, 08-54 (even numbers only)	**Order No.** 14-57-5**XX**2 Replace "**XX**" with number of circuits, 08-54 (even numbers only)	**Order No.** 14-57-2**XX**2 Replace "**XX**" with number of circuits, 08-54 (even numbers only)
Wire Accomodation 24 AWG		
Order No. 14-57-3**XX**4 Replace "**XX**" with number of circuits, 08-54 (even numbers only)	**Order No.** 14-57-4**XX**9 Replace "**XX**" with number of circuits, 08-54 (even numbers only)	**Order No.** 14-57-1**XX**8 Replace "**XX**" with number of circuits, 08-54 (even numbers only)
Wire Accommodation 22 AWG		
Order No. 14-57-3**XX**1 Replace "**XX**" with number of circuits, 08-54 (even numbers only)	**Order No.** 14-57-4**XX**6 Replace "**XX**" with number of circuits, 08-54 (even numbers only)	**Order No.** 14-57-1**XX**5 Replace "**XX**" with number of circuits, 08-54 (even numbers only)

Specifications for Single Row Shrouded Headers

- For use with .062", .093"/.125" thick printed circuit boards

Material:

Pins - .025" square, phosphor bronze

Insulator - UL 94V-0 glass filled PCT, black; Vapor phase and infrared process compatible

Electrical:

Current rating - 3 amps

Insulation Resistance - 1,000 megaohms

Dielectric Strength - 600 VAC r.m.s for 1 minute

Environmental:

Operating Temperature - -40°C to +125°C

Mechanical:

Min. Pushout Force - 4 lbs.

Platings:

No. 1 - 15 µ in. min. gold in select area over 50 µ in. min. nickel overall, with 75 µ in. min. electro-tin/lead in select area.

No. 2 - 30 µ in. min. gold in select area over 50 µ in. min. nickel plate overall, with 75 µ in. electro-tin/lead in select area.

No. 3 - 150 µ in. tin/lead over 50 µ in. nickel overall.

Automation:
Headers loaded in plastic tubes can be robotically inserted into the printed circuit board

PCB Locks:
Hold headers in place until they are permanently secured at the wave solder station

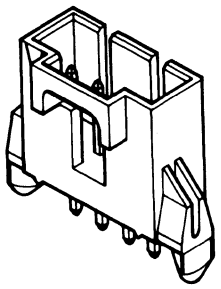
Standoffs (.015"/.020"):[1]
Keep headers off the board to aid in cleaning flux from the board through solder wash.

Positive Latch Mechanism:[2]
Retains connector in the header housing

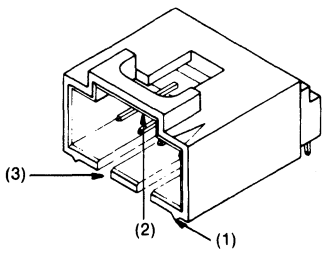
Polarization Slots:[3]
Prevent pin/contact damage and polarize the post/receptacle mating.

Drawn Wire .025" Square Pins:
Provides 4-sided smooth surface for quality interface.

UL listed, CSA certified



Standard Tri-peg



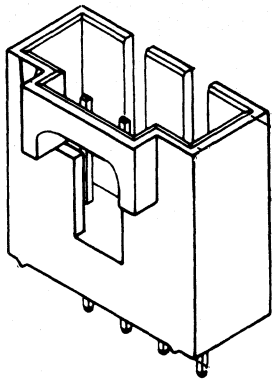
Low profile Right Angle Header

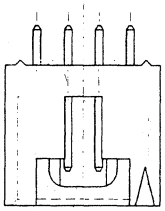
Single Row
.120" Pocket Straight Header

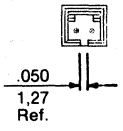
A

70543 Series

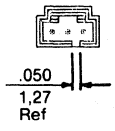
- **Mates with "G" Version** connectors 70400, 70430 & 70066
- Loaded in plastic tubes to allow for robotic insertion into P.C. boards
- Polarization slots
- Positive latch retains connector after mating
- Standoffs minimize flux retention
- Circuit sizes 2-25
- Insulator 94V-0, glass filled PCT, Black. Vapor phase and IR compatible



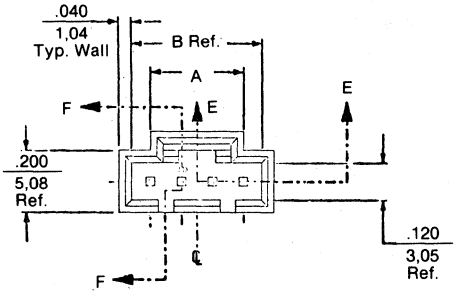


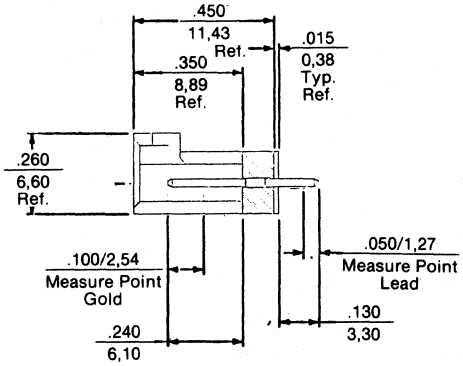


2 Circuit

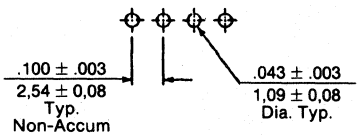


3 Circuit



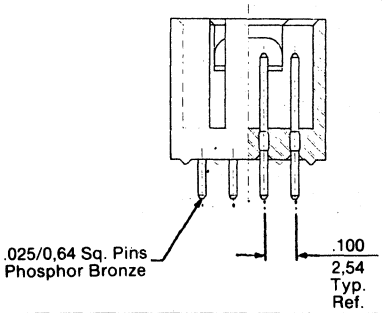


SECTION F-F



Recommended P.C. Board Layout
(For use with .062/1,57 Thick Board)

SECTION E-E



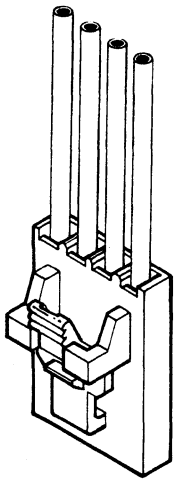
Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.210 5,33	8	.700 17,78	.820 20,83	14	1.300 33,02	1.420 36,07	20	1.900 48,26	2.020 51,31
3	.200 5,08	.320 8,13	9	.800 20,32	.920 23,37	15	1.400 35,56	1.520 38,61	21	2.000 50,80	2.120 53,85
4	.300 7,62	.420 10,67	10	.900 22,86	1.020 25,91	16	1.500 38,10	1.620 41,15	22	2.100 53,34	2.220 56,39
5	.400 10,16	.520 13,21	11	1.000 25,40	1.120 28,45	17	1.600 40,64	1.720 43,69	23	2.200 55,88	2.320 58,93
6	.500 12,70	.620 15,75	12	1.100 27,94	1.220 30,99	18	1.700 43,18	1.820 46,23	24	2.300 58,42	2.420 61,47
7	.600 15,24	.720 18,29	13	1.200 30,48	1.320 33,53	19	1.800 45,72	1.920 48,77	25	2.400 60,96	2.520 64,01

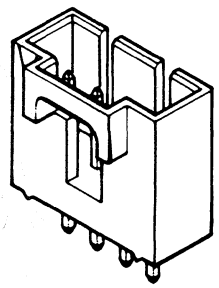
Single Row .120" Pocket Straight Header

A

70543 Series



70066-G
70400-G
70430-G



70543

70543 Header mates with connector "G" Version

Ordering Information

PLATING: 15 MICROINCHES MIN. GOLD				PLATING: 30 MICROINCHES MIN. GOLD				PLATING: 150 MICROINCHES TIN/LEAD			
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	•70543-0001	14	•70543-0013	2	70543-0106	14	70543-0118	2	70543-0036	14	70543-0048
3	•70543-0002	15	•70543-0014	3	70543-0107	15	70543-0119	3	70543-0037	15	70543-0049
4	•70543-0003	16	•70543-0015	4	70543-0108	16	70543-0120	4	70543-0038	16	70543-0050
5	•70543-0004	17	•70543-0016	5	70543-0109	17	70543-0121	5	70543-0039	17	70543-0051
6	•70543-0005	18	•70543-0017	6	70543-0110	18	70543-0122	6	70543-0040	18	70543-0052
7	•70543-0006	19	•70543-0018	7	70543-0111	19	70543-0123	7	70543-0041	19	70543-0053
8	•70543-0007	20	•70543-0019	8	70543-0112	20	70543-0124	8	70543-0042	20	70543-0054
9	•70543-0008	21	•70543-0020	9	70543-0113	21	70543-0125	9	70543-0043	21	70543-0055
10	•70543-0009	22	•70543-0021	10	70543-0114	22	70543-0126	10	70543-0044	22	70543-0056
11	•70543-0010	23	•70543-0022	11	70543-0115	23	70543-0127	11	70543-0045	23	70543-0057
12	•70543-0011	24	•70543-0023	12	70543-0116	24	70543-0128	12	70543-0046	24	70543-0058
13	•70543-0012	25	•70543-0024	13	70543-0117	25	70543-0129	13	70543-0047	25	70543-0059

▨ Highlighted area denotes preferred standard product. Usually available with shorter leadtimes.

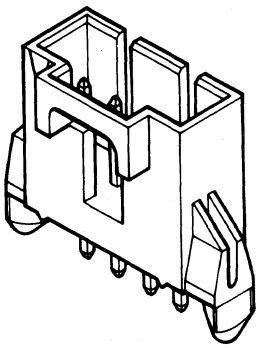
• U.S. Standard Product, available through Molex franchised distributors.

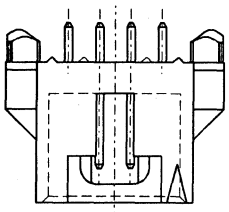
Single Row .120" Pocket Straight Header, TRI-PEG

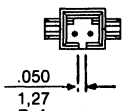
A

70545 Series

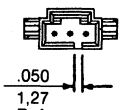
- **Mates with "G" Version** connectors 70400, 70430 & 70066
- Loaded in plastic tubes to allow for robotic insertion into P.C. boards
- Polarization slots
- Positive latch retains connector after mating
- Standoffs minimize flux retention
- Circuit sizes 2-25
- PCB locks hold header in place until they are permanently secured by soldering
- Insulator 94V-0, glass filled PCT, Black. Vapor phase and IR compatible



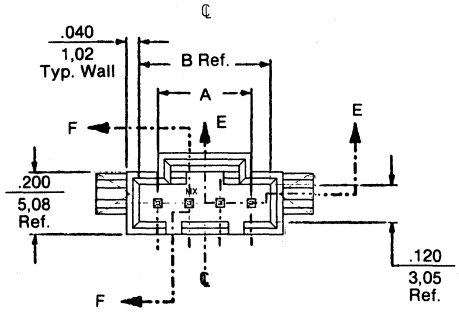


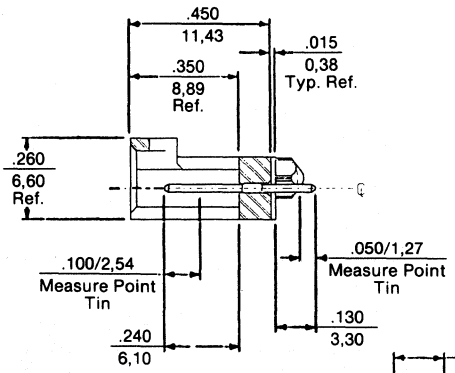


2 Circuit

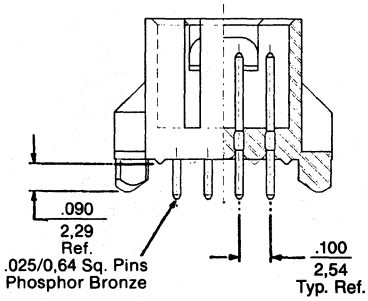


3 Circuit

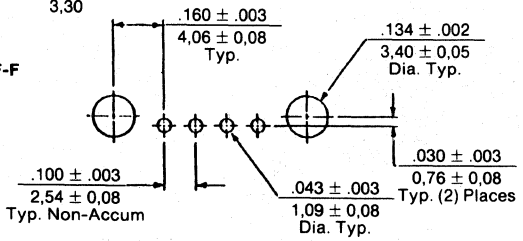




SECTION F-F



SECTION E-E



Recommended P.C. Board Layout
(For Use with .062/1,57 Thick Board)

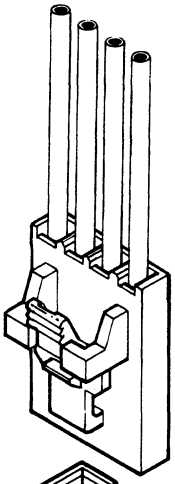
Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.210 5,33	8	.700 17,78	.820 20,83	14	1.300 33,02	1.420 36,07	20	1.900 48,26	2.020 51,31
3	.200 5,08	.320 8,13	9	.800 20,32	.920 23,37	15	1.400 35,56	1.520 38,61	21	2.000 50,80	2.120 53,85
4	.300 7,62	.420 10,67	10	.900 22,86	1.020 25,91	16	1.500 38,10	1.620 41,15	22	2.100 53,34	2.220 56,39
5	.400 10,16	.520 13,21	11	1.000 25,40	1.120 28,45	17	1.600 40,64	1.720 43,69	23	2.200 55,88	2.320 58,93
6	.500 12,70	.620 15,75	12	1.100 27,94	1.220 30,99	18	1.700 43,18	1.820 46,23	24	2.300 58,42	2.420 61,47
7	.600 15,24	.720 18,29	13	1.200 30,48	1.320 33,53	19	1.800 45,72	1.920 48,77	25	2.400 60,96	2.520 64,01

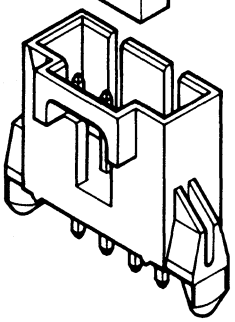
Single Row .120" Pocket Straight Header, TRI-PEG

A

70545 Series



70066-G
70400-G
70430-G



70545

70545 Header mates with connector "G" Version

Ordering Information

PLATING: 15 MICROINCHES MIN. GOLD				PLATING: 30 MICROINCHES MIN. GOLD				PLATING: 150 MICROINCHES TIN/LEAD			
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	• 70545-0036	14	• 70545-0048	2	70545-0071	14	70545-0083	2	70545-0001	14	70545-0013
3	• 70545-0037	15	• 70545-0049	3	70545-0072	15	70545-0084	3	70545-0002	15	70545-0014
4	• 70545-0038	16	• 70545-0050	4	70545-0073	16	70545-0085	4	70545-0003	16	70545-0015
5	• 70545-0039	17	• 70545-0051	5	70545-0074	17	70545-0086	5	70545-0004	17	70545-0016
6	• 70545-0040	18	• 70545-0052	6	70545-0075	18	70545-0087	6	70545-0005	18	70545-0017
7	• 70545-0041	19	• 70545-0053	7	70545-0076	19	70545-0088	7	70545-0006	19	70545-0018
8	• 70545-0042	20	• 70545-0054	8	70545-0077	20	70545-0089	8	70545-0007	20	70545-0019
9	• 70545-0043	21	• 70545-0055	9	70545-0078	21	70545-0090	9	70545-0008	21	70545-0020
10	• 70545-0044	22	• 70545-0056	10	70545-0079	22	70545-0091	10	70545-0009	22	70545-0021
11	• 70545-0045	23	• 70545-0057	11	70545-0080	23	70545-0092	11	70545-0010	23	70545-0022
12	• 70545-0046	24	• 70545-0058	12	70545-0081	24	70545-0093	12	70545-0011	24	70545-0023
13	• 70545-0047	25	• 70545-0059	13	70545-0082	25	70545-0094	13	70545-0012	25	70545-0024

▨ Highlighted area denotes preferred standard product. Usually available with shorter leadtimes.

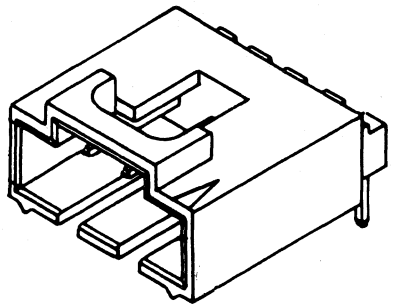
• U.S. Standard Product, available through Molex franchised distributors.

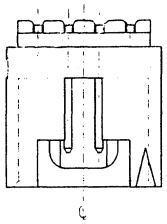
.120" Pocket Low Profile Right Angle Header

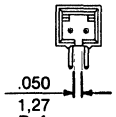
A

70553 Series

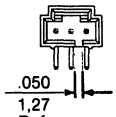
- **Mates with "G" Version** connectors 70400, 70430 & 70066
- Loaded in plastic tubes to allow for robotic insertion into P.C. boards
- Polarization slots
- Positive latch retains connector after mating
- Standoffs minimize flux retention
- Circuit sizes 2-25
- Insulator 94V-0, glass filled PCT, Black. Vapor phase and IR compatible



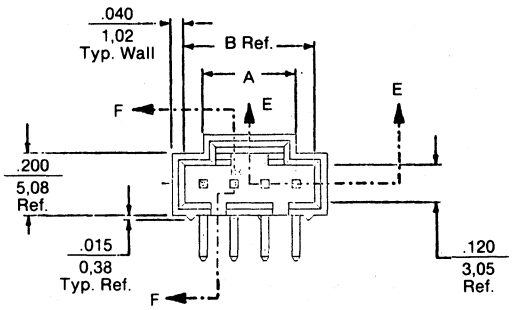


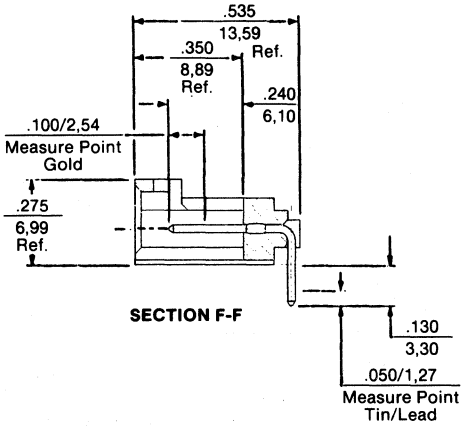


2 Circuit

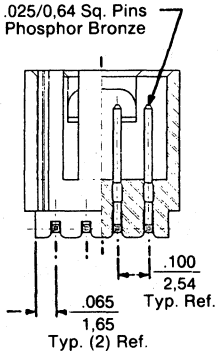


3 Circuit



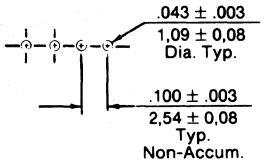


SECTION F-F



SECTION E-E

Recommended P.C. Board Hole Layout



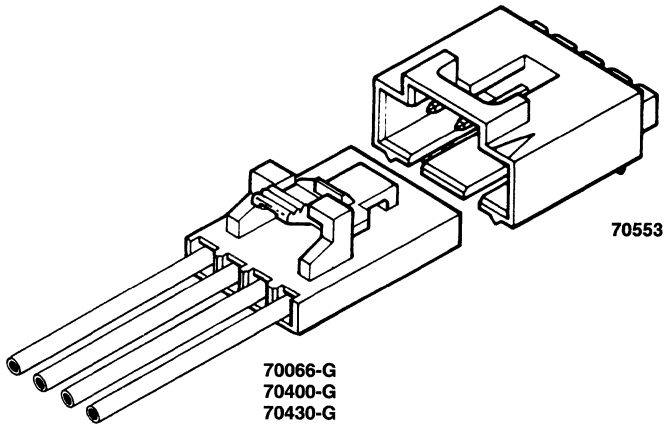
Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.210 5,33	8	.700 17,78	.820 20,83	14	1.300 33,02	1.420 36,07	20	1.900 48,26	2.020 51,31
3	.200 5,08	.320 8,13	9	.800 20,32	.920 23,37	15	1.400 35,56	1.520 38,61	21	2.000 50,80	2.120 53,85
4	.300 7,62	.420 10,67	10	.900 22,86	1.020 25,91	16	1.500 38,10	1.620 41,15	22	2.100 53,34	2.220 56,39
5	.400 10,16	.520 13,21	11	1.000 25,40	1.120 28,45	17	1.600 40,64	1.720 43,69	23	2.200 55,88	2.320 58,93
6	.500 12,70	.620 15,75	12	1.100 27,94	1.220 30,99	18	1.700 43,18	1.820 46,23	24	2.300 58,42	2.420 61,47
7	.600 15,24	.720 18,29	13	1.200 30,48	1.320 33,53	19	1.800 45,72	1.920 48,77	25	2.400 60,96	2.520 64,01

Single Row .120" Pocket Low Profile Right Angle Header

A

70553 Series



70553 Header mates with connector "G" Version

Ordering Information

PLATING: 15 MICROINCHES MIN. GOLD				PLATING: 30 MICROINCHES MIN. GOLD				PLATING: 150 MICROINCHES TIN/LEAD			
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	• 70553-0001	14	• 70553-0013	2	70553-0106	14	70553-0118	2	70553-0036	14	70553-0048
3	• 70553-0002	15	• 70553-0014	3	70553-0107	15	70553-0119	3	70553-0037	15	70553-0049
4	• 70553-0003	16	• 70553-0015	4	70553-0108	16	70553-0120	4	70553-0038	16	70553-0050
5	• 70553-0004	17	• 70553-0016	5	70553-0109	17	70553-0121	5	70553-0039	17	70553-0051
6	• 70553-0005	18	• 70553-0017	6	70553-0110	18	70553-0122	6	70553-0040	18	70553-0052
7	• 70553-0006	19	• 70553-0018	7	70553-0111	19	70553-0123	7	70553-0041	19	70553-0053
8	• 70553-0007	20	• 70553-0019	8	70553-0112	20	70553-0124	8	70553-0042	20	70553-0054
9	• 70553-0008	21	• 70553-0020	9	70553-0113	21	70553-0125	9	70553-0043	21	70553-0055
10	• 70553-0009	22	• 70553-0021	10	70553-0114	22	70553-0126	10	70553-0044	22	70553-0056
11	• 70553-0010	23	• 70553-0022	11	70553-0115	23	70553-0127	11	70553-0045	23	70553-0057
12	• 70553-0011	24	• 70553-0023	12	70553-0116	24	70553-0128	12	70553-0046	24	70553-0058
13	• 70553-0012	25	• 70553-0024	13	70553-0117	25	70553-0129	13	70553-0047	25	70553-0059

▨ Highlighted area denotes preferred standard product. Usually available with shorter leadtimes.

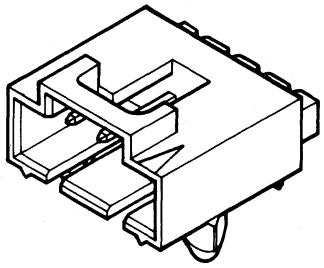
• U.S. Standard Product, available through Molex franchised distributors.

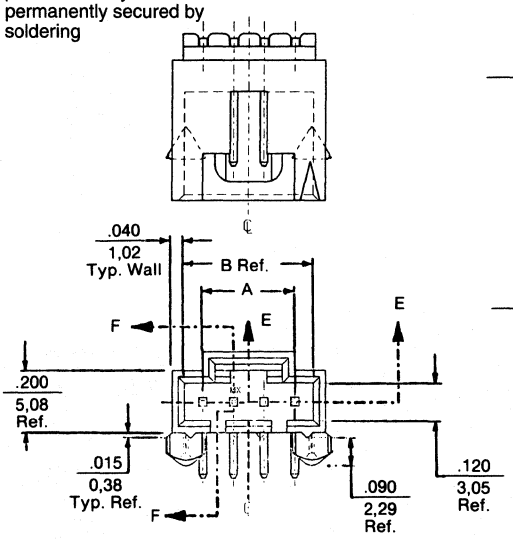
Single Row .120" Pocket Right Angle Header, TRI-PEG

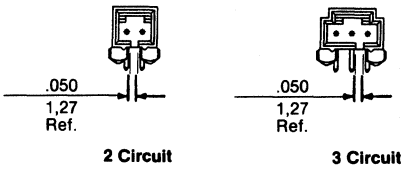
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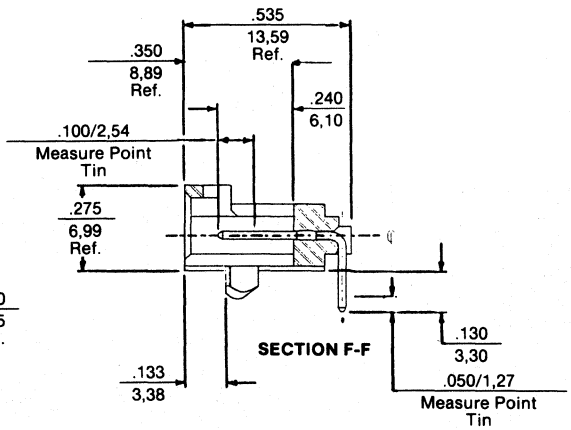
70555 Series

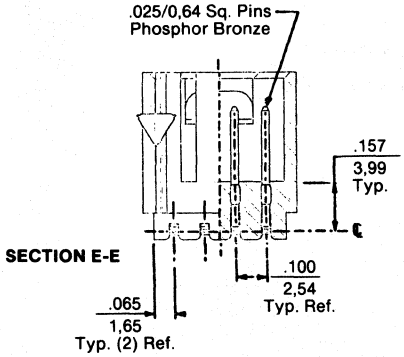
- **Mates with "G" Version** connectors 70400, 70430 & 70066
- Loaded in plastic tubes to allow for robotic insertion into P.C. boards
- Polarization slots
- Positive latch retains connector after mating
- Standoffs minimize flux retention
- Circuit sizes 2-25
- PCB locks hold header in place until they are permanently secured by soldering
- Insulator 94V-0, glass filled PCT, Black. Vapor phase and IR compatible

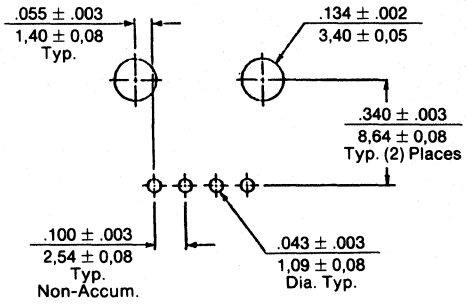












Recommended P.C. Board Layout
(For Use with .062/1,57 Thick Board)

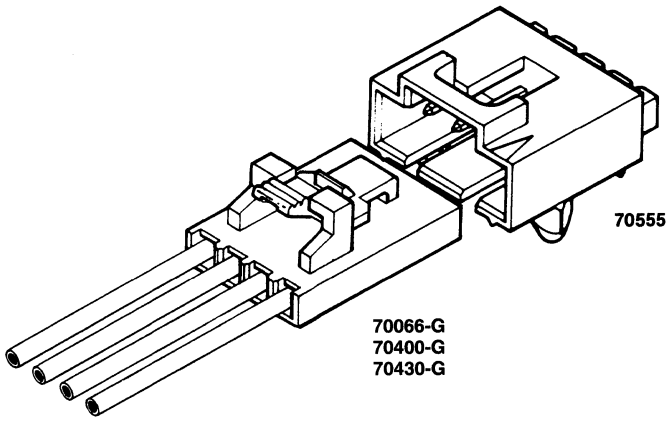
Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.210 5,33	8	.700 17,78	.820 20,83	14	1.300 33,02	1.420 36,07	20	1.900 48,26	2.020 51,31
3	.200 5,08	.320 8,13	9	.800 20,32	.920 23,37	15	1.400 35,56	1.520 38,61	21	2.000 50,80	2.120 53,85
4	.300 7,62	.420 10,67	10	.900 22,86	1.020 25,91	16	1.500 38,10	1.620 41,15	22	2.100 53,34	2.220 56,39
5	.400 10,16	.520 13,21	11	1.000 25,40	1.120 28,45	17	1.600 40,64	1.720 43,69	23	2.200 55,88	2.320 58,93
6	.500 12,70	.620 15,75	12	1.100 27,94	1.220 30,99	18	1.700 43,18	1.820 46,23	24	2.300 58,42	2.420 61,47
7	.600 15,24	.720 18,29	13	1.200 30,48	1.320 33,53	19	1.800 45,72	1.920 48,77	25	2.400 60,96	2.520 64,01

Single Row .120" Pocket Right Angle Header, TRI-PEG

A

70555 Series



70555 Header mates with connector "G" Version

Ordering Information

PLATING: 15 MICROINCHES MIN. GOLD				PLATING: 30 MICROINCHES MIN. GOLD				PLATING: 150 MICROINCHES TIN/LEAD			
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	•70555-0036	14	•70555-0048	2	70555-0071	14	70555-0083	2	70555-0001	14	70555-0013
3	•70555-0037	15	•70555-0049	3	70555-0072	15	70555-0084	3	70555-0002	15	70555-0014
4	•70555-0038	16	•70555-0050	4	70555-0073	16	70555-0085	4	70555-0003	16	70555-0015
5	•70555-0039	17	•70555-0051	5	70555-0074	17	70555-0086	5	70555-0004	17	70555-0016
6	•70555-0040	18	•70555-0052	6	70555-0075	18	70555-0087	6	70555-0005	18	70555-0017
7	•70555-0041	19	•70555-0053	7	70555-0076	19	70555-0088	7	70555-0006	19	70555-0018
8	•70555-0042	20	•70555-0054	8	70555-0077	20	70555-0089	8	70555-0007	20	70555-0019
9	•70555-0043	21	•70555-0055	9	70555-0078	21	70555-0090	9	70555-0008	21	70555-0020
10	•70555-0044	22	•70555-0056	10	70555-0079	22	70555-0091	10	70555-0009	22	70555-0021
11	•70555-0045	23	•70555-0057	11	70555-0080	23	70555-0092	11	70555-0010	23	70555-0022
12	•70555-0046	24	•70555-0058	12	70555-0081	24	70555-0093	12	70555-0011	24	70555-0023
13	•70555-0047	25	•70555-0059	13	70555-0082	25	70555-0094	13	70555-0012	25	70555-0024

▨ Highlighted area denotes preferred standard product. Usually available with shorter leadtimes.

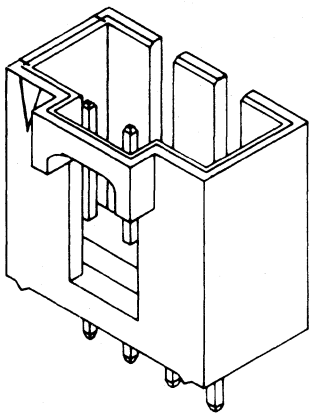
• U.S. Standard Product, available through Molex franchised distributors.

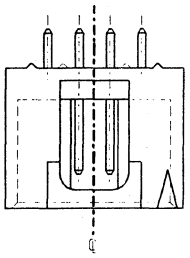
Single Row .180" Pocket Straight Header

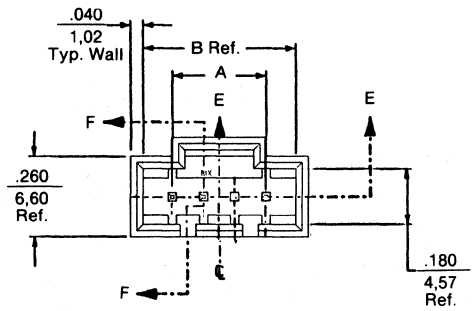
A

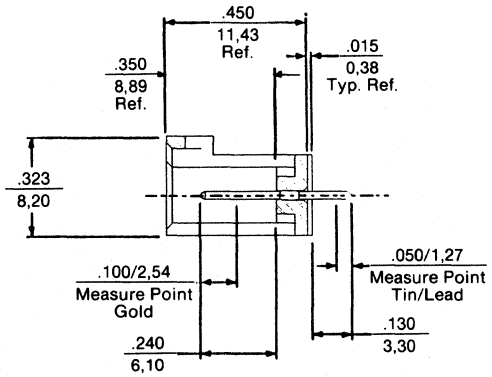
70563 Series

- Loaded in plastic tubes to allow for robotic insertion into P.C. boards
- Positive latch retains connection after mating
- Polarization slots
- Circuit sizes 4-25
- Mates with 70004 Interim Clip
- Insulator 94V-0, glass filled PCT, Black. Vapor phase and IR compatible

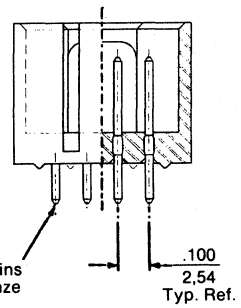




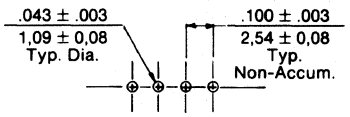




SECTION F-F



SECTION E-E



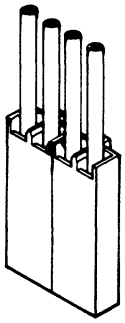
Recommended P.C. Board Hole Layout

Dimensions

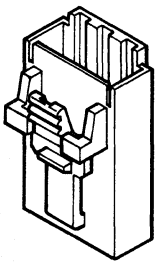
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.300 7,62	.490 12,45	10	.900 22,86	1.090 27,69	16	1.500 38,10	1.690 42,93	21	2.000 50,80	2.190 55,63
5	.400 10,16	.590 14,99	11	1.000 25,40	1.190 30,23	17	1.600 40,64	1.790 45,47	22	2.100 53,34	2.290 58,17
6	.500 12,70	.690 17,53	12	1.100 27,94	1.290 32,77	18	1.700 43,18	1.890 48,01	23	2.200 55,88	2.390 60,71
7	.600 15,24	.790 20,07	13	1.200 30,48	1.390 35,31	19	1.800 45,72	1.990 50,55	24	2.300 58,42	2.490 63,25
8	.700 17,78	.890 22,61	14	1.300 33,02	1.490 37,85	20	1.900 48,26	2.090 53,09	25	2.400 60,96	2.590 65,79
9	.800 20,32	.990 25,15	15	1.400 35,56	1.590 40,39						

Single Row .180" Pocket Straight Header

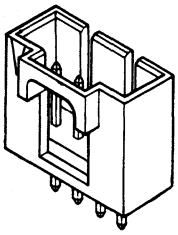
70563 Series



70400-D
70066-D



70004



70563

70563 Header mates with 70004 Interim Clip

Ordering Information

PLATING: 15 MICROINCHES MIN. GOLD				PLATING: 30 MICROINCHES MIN. GOLD				PLATING: 150 MICROINCHES TIN/LEAD			
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	• 70563-0003	15	• 70563-0014	4	70563-0108	15	70563-0119	4	70563-0038	15	70563-0049
5	• 70563-0004	16	• 70563-0015	5	70563-0109	16	70563-0120	5	70563-0039	16	70563-0050
6	• 70563-0005	17	• 70563-0016	6	70563-0110	17	70563-0121	6	70563-0040	17	70563-0051
7	• 70563-0006	18	• 70563-0017	7	70563-0111	18	70563-0122	7	70563-0041	18	70563-0052
8	• 70563-0007	19	• 70563-0018	8	70563-0112	19	70563-0123	8	70563-0042	19	70563-0053
9	• 70563-0008	20	• 70563-0019	9	70563-0113	20	70563-0124	9	70563-0043	20	70563-0054
10	• 70563-0009	21	• 70563-0020	10	70563-0114	21	70563-0125	10	70563-0044	21	70563-0055
11	• 70563-0010	22	• 70563-0021	11	70563-0115	22	70563-0126	11	70563-0045	22	70563-0056
12	• 70563-0011	23	• 70563-0022	12	70563-0116	23	70563-0127	12	70563-0046	23	70563-0057
13	• 70563-0012	24	• 70563-0023	13	70563-0117	24	70563-0128	13	70563-0047	24	70563-0058
14	• 70563-0013	25	• 70563-0024	14	70563-0118	25	70563-0129	14	70563-0048	25	70563-0059

▩ Highlighted area denotes preferred standard product. Usually available with shorter leadtimes.

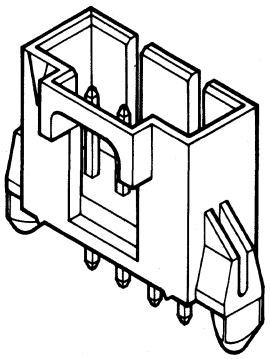
• U.S. Standard Product, available through Molex franchised distributors.

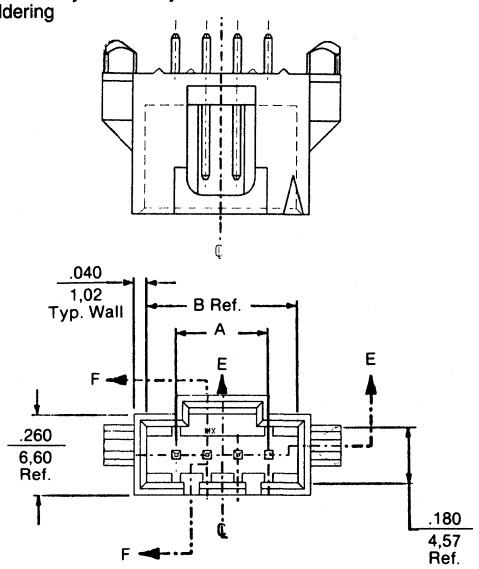
Single Row .180" Pocket Straight Header, TRI-PEG

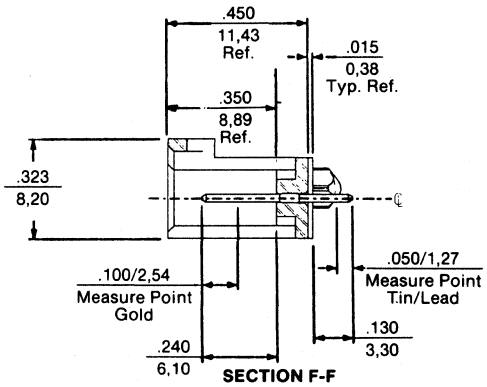
A

70565 Series

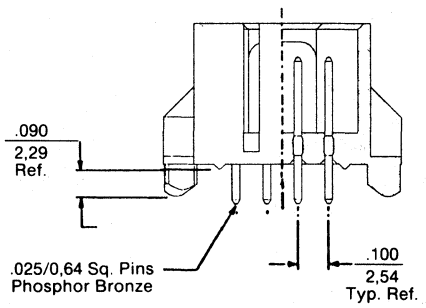
- Loaded in plastic tubes to allow for robotic insertion into P.C. boards
- Positive latch retains connector after mating
- Polarization slots
- Circuit sizes 4-25
- Mates with 70004 Interim Clip
- PCB locks hold header in place until they are permanently secured by soldering
- Insulator 94V-0, glass filled PCT, Black. Vapor phase and IR compatible



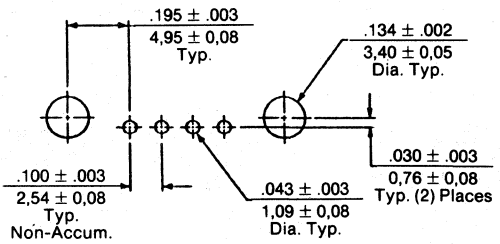




SECTION F-F



SECTION E-E



Recommended P.C. Board Layout
(For Use with .062/1,57 Thick Board)

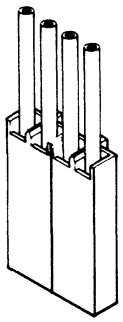
Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.300 7,62	.490 12,45	10	.900 22,86	1.090 27,69	16	1.500 38,10	1.690 42,93	21	2.000 50,80	2.190 55,63
5	.400 10,16	.590 14,99	11	1.000 25,40	1.190 30,23	17	1.600 40,64	1.790 45,47	22	2.100 53,34	2.290 58,17
6	.500 12,70	.690 17,53	12	1.100 27,94	1.290 32,77	18	1.700 43,18	1.890 48,01	23	2.200 55,88	2.390 60,71
7	.600 15,24	.790 20,07	13	1.200 30,48	1.390 35,31	19	1.800 45,72	1.990 50,55	24	2.300 58,42	2.490 63,25
8	.700 17,78	.890 22,61	14	1.300 33,02	1.490 37,85	20	1.900 48,26	2.090 53,09	25	2.400 60,96	2.590 65,79
9	.800 20,32	.990 25,15	15	1.400 35,56	1.590 40,39						

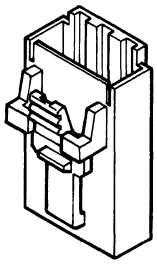
Single Row .180" Pocket Straight Header, TRI-PEG

A

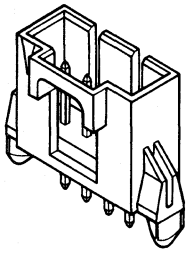
70565 Series



70400-D
70066-D



70004



70565

70565 Header mates with 70004 Interim Clip with 70400-"D" Version Connector inserted

Ordering Information

PLATING: 15 MICROINCHES MIN. GOLD				PLATING: 30 MICROINCHES MIN. GOLD				PLATING: 150 MICROINCHES TIN/LEAD			
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	•70565-0038	15	•70565-0049	4	70565-0073	15	70565-0084	4	70565-0003	15	70565-0014
5	•70565-0039	16	•70565-0050	5	70565-0074	16	70565-0085	5	70565-0004	16	70565-0015
6	•70565-0040	17	•70565-0051	6	70565-0075	17	70565-0086	6	70565-0005	17	70565-0016
7	•70565-0041	18	•70565-0052	7	70565-0076	18	70565-0087	7	70565-0006	18	70565-0017
8	•70565-0042	19	•70565-0053	8	70565-0077	19	70565-0088	8	70565-0007	19	70565-0018
9	•70565-0043	20	•70565-0054	9	70565-0078	20	70565-0089	9	70565-0008	20	70565-0019
10	•70565-0044	21	•70565-0055	10	70565-0079	21	70565-0090	10	70565-0009	21	70565-0020
11	•70565-0045	22	•70565-0056	11	70565-0080	22	70565-0091	11	70565-0010	22	70565-0021
12	•70565-0046	23	•70565-0057	12	70565-0081	23	70565-0092	12	70565-0011	23	70565-0022
13	•70565-0047	24	•70565-0058	13	70565-0082	24	70565-0093	13	70565-0012	24	70565-0023
14	•70565-0048	25	•70565-0059	14	70565-0083	25	70565-0094	14	70565-0013	25	70565-0024

▨ Highlighted area denotes preferred standard product. Usually available with shorter leadtimes.

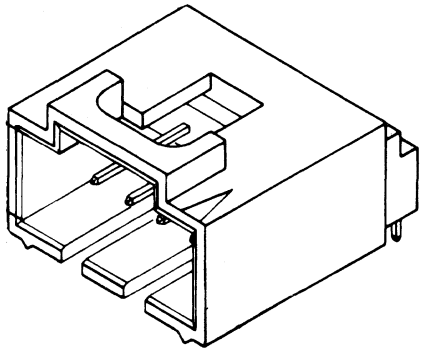
• U.S. Standard Product, available through Molex franchised distributors.

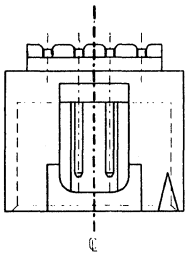
Single Row .180" Pocket Right Angle Header

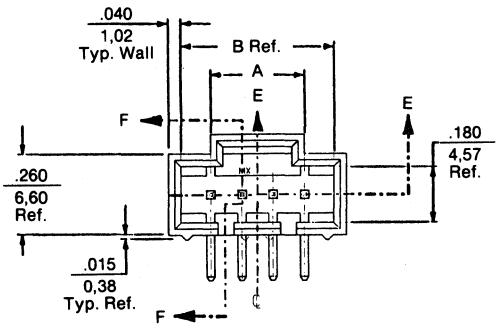
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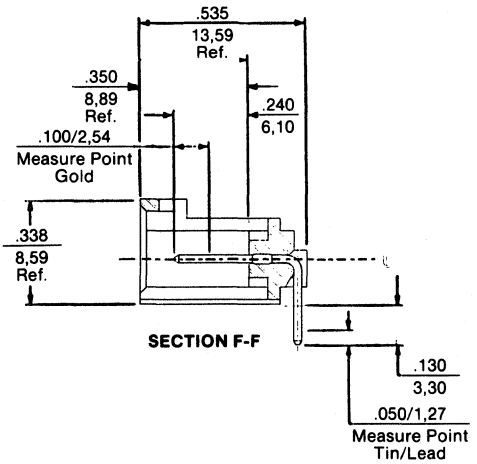
70573 Series

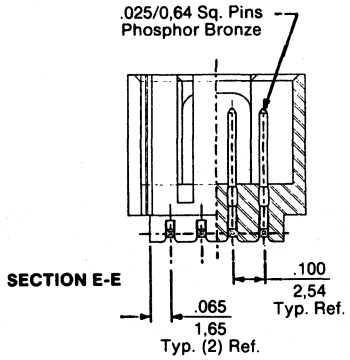
- Loaded in plastic tubes to allow for robotic insertion into P.C. boards
- Positive latch retains interim clip after mating
- Polarization slots
- Standoffs minimize flux retention
- Mates with 70004 single row interim clip
- Circuit sizes 4-25
- Insulator 94V-0, glass filled PCT, Black. Vapor phase and IR compatible

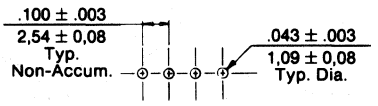












Recommended P.C. Board Hole Layout

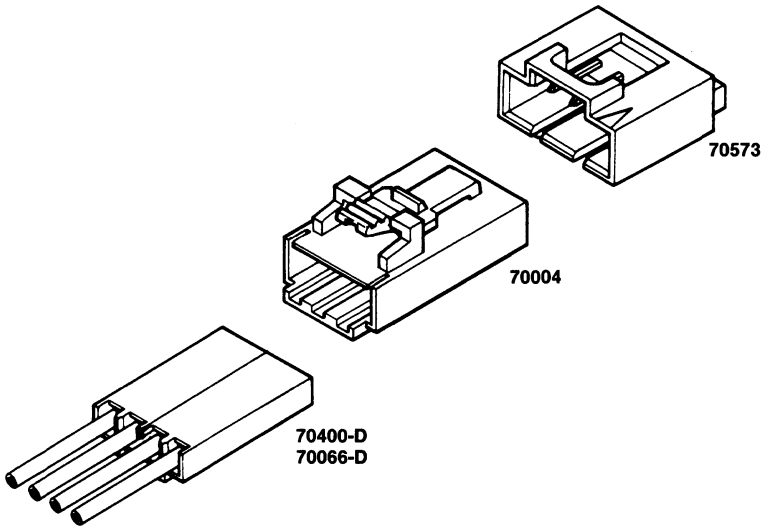
Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.300 7,62	.490 12,45	10	.900 22,86	1.090 27,69	16	1.500 38,10	1.690 42,93	21	2.000 50,80	2.190 55,63
5	.400 10,16	.590 14,99	11	1.000 25,40	1.190 30,23	17	1.600 40,64	1.790 45,47	22	2.100 53,34	2.290 58,17
6	.500 12,70	.690 17,53	12	1.100 27,94	1.290 32,77	18	1.700 43,18	1.890 48,01	23	2.200 55,88	2.390 60,71
7	.600 15,24	.790 20,07	13	1.200 30,48	1.390 35,31	19	1.800 45,72	1.990 50,55	24	2.300 58,42	2.490 63,25
8	.700 17,78	.890 22,61	14	1.300 33,02	1.490 37,85	20	1.900 48,26	2.090 53,09	25	2.400 60,96	2.590 65,79
9	.800 20,32	.990 25,15	15	1.400 35,56	1.590 40,39						

Single Row .180" Pocket Right Angle Header

A

70573 Series



70573 Header mates with 70004 Interim Clip

Ordering Information

PLATING: 15 MICROINCHES MIN. GOLD				PLATING: 30 MICROINCHES MIN. GOLD				PLATING: 150 MICROINCHES TIN/LEAD			
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	• 70573-0003	15	• 70573-0014	4	70573-0108	15	70573-0119	4	70573-0038	15	70573-0049
5	• 70573-0004	16	• 70573-0015	5	70573-0109	16	70573-0120	5	70573-0039	16	70573-0050
6	• 70573-0005	17	• 70573-0016	6	70573-0110	17	70573-0121	6	70573-0040	17	70573-0051
7	• 70573-0006	18	• 70573-0017	7	70573-0111	18	70573-0122	7	70573-0041	18	70573-0052
8	• 70573-0007	19	• 70573-0018	8	70573-0112	19	70573-0123	8	70573-0042	19	70573-0053
9	• 70573-0008	20	• 70573-0019	9	70573-0113	20	70573-0124	9	70573-0043	20	70573-0054
10	• 70573-0009	21	• 70573-0020	10	70573-0114	21	70573-0125	10	70573-0044	21	70573-0055
11	• 70573-0010	22	• 70573-0021	11	70573-0115	22	70573-0126	11	70573-0045	22	70573-0056
12	• 70573-0011	23	• 70573-0022	12	70573-0116	23	70573-0127	12	70573-0046	23	70573-0057
13	• 70573-0012	24	• 70573-0023	13	70573-0117	24	70573-0128	13	70573-0047	24	70573-0058
14	• 70573-0013	25	• 70573-0024	14	70573-0118	25	70573-0129	14	70573-0048	25	70573-0059

▨ Highlighted area denotes preferred standard product. Usually available with shorter leadtimes.

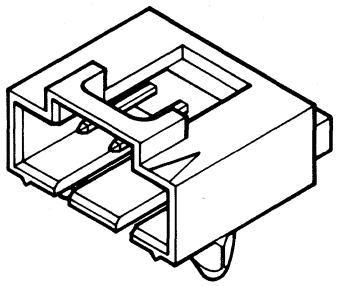
• U.S. Standard Product, available through Molex franchised distributors.

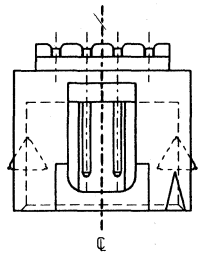
Single Row .180" Pocket Right Angle Header, TRI-PEG

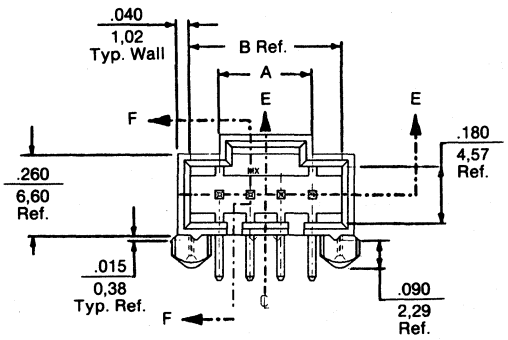
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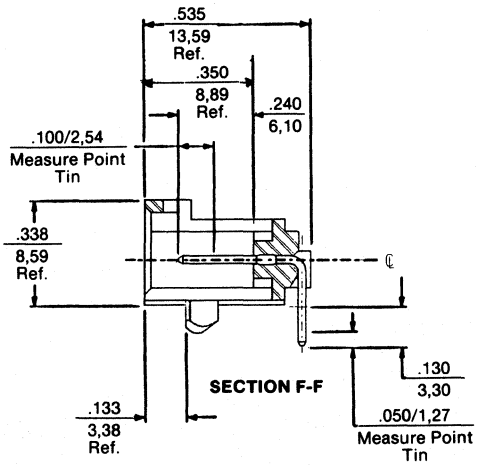
70575 Series

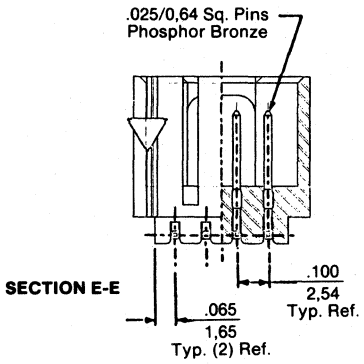
- Loaded in plastic tubes to allow for robotic insertion into P.C. boards
- Positive latch retains interim clip after mating
- Polarization slots
- Standoffs minimize flux retention
- Mates with 70004 single row interim clip
- Circuit sizes 4-25
- PCB locks hold header in place until they are permanently secured by soldering
- Insulator 94V-0, glass filled PCT, Black. Vapor phase and IR compatible

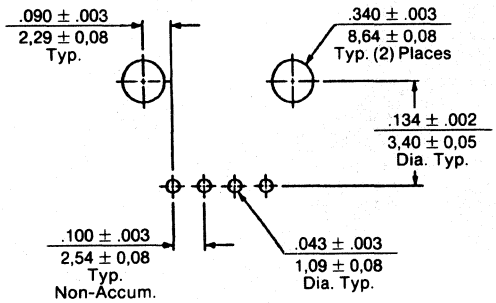












Recommended P.C. Board Layout
(For Use with .062/1,57 Thick Board)

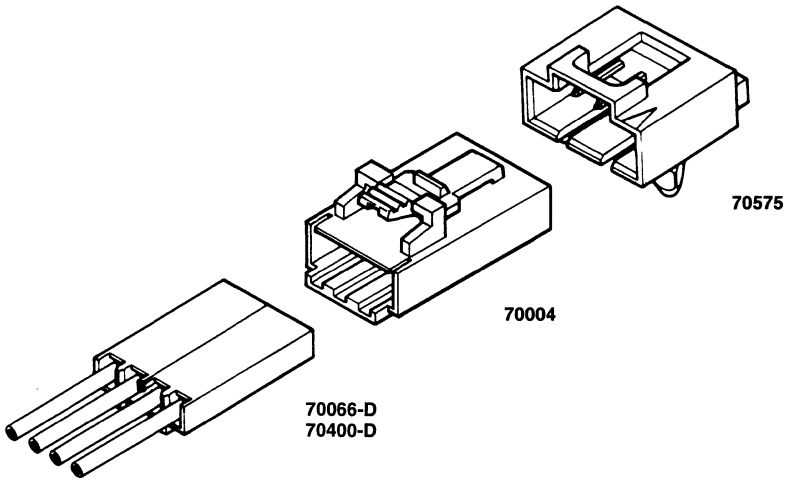
Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.300 7,62	.490 12,45	10	.900 22,86	1.090 27,69	16	1.500 38,10	1.690 42,93	21	2.000 50,80	2.190 55,63
5	.400 10,16	.590 14,99	11	1.000 25,40	1.190 30,23	17	1.600 40,64	1.790 45,47	22	2.100 53,34	2.290 58,17
6	.500 12,70	.690 17,53	12	1.100 27,94	1.290 32,77	18	1.700 43,18	1.890 48,01	23	2.200 55,88	2.390 60,71
7	.600 15,24	.790 20,07	13	1.200 30,48	1.390 35,31	19	1.800 45,72	1.990 50,55	24	2.300 58,42	2.490 63,25
8	.700 17,78	.890 22,61	14	1.300 33,02	1.490 37,85	20	1.900 48,26	2.090 53,09	25	2.400 60,96	2.590 65,79
9	.800 20,32	.990 25,15	15	1.400 35,56	1.590 40,39						

Single Row .180" Pocket Right Angle Header, TRI-PEG

A

70575 Series



70575 Header mates with 70004 Interim Clip with Clip with 70400 "D" Version inserted

Ordering Information

PLATING: 15 MICROINCHES MIN. GOLD				PLATING: 30 MICROINCHES MIN. GOLD				PLATING: 150 MICROINCHES TIN/LEAD			
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	• 70575-0038	15	• 70575-0049	4	70575-0073	15	70575-0084	4	70575-0003	15	70575-0014
5	• 70575-0039	16	• 70575-0050	5	70575-0074	16	70575-0085	5	70575-0004	16	70575-0015
6	• 70575-0040	17	• 70575-0051	6	70575-0075	17	70575-0086	6	70575-0005	17	70575-0016
7	• 70575-0041	18	• 70575-0052	7	70575-0076	18	70575-0087	7	70575-0006	18	70575-0017
8	• 70575-0042	19	• 70575-0053	8	70575-0077	19	70575-0088	8	70575-0007	19	70575-0018
9	• 70575-0043	20	• 70575-0054	9	70575-0078	20	70575-0089	9	70575-0008	20	70575-0019
10	• 70575-0044	21	• 70575-0055	10	70575-0079	21	70575-0090	10	70575-0009	21	70575-0020
11	• 70575-0045	22	• 70575-0056	11	70575-0080	22	70575-0091	11	70575-0010	22	70575-0021
12	• 70575-0046	23	• 70575-0057	12	70575-0081	23	70575-0092	12	70575-0011	23	70575-0022
13	• 70575-0047	24	• 70575-0058	13	70575-0082	24	70575-0093	13	70575-0012	24	70575-0023
14	• 70575-0048	25	• 70575-0059	14	70575-0083	25	70575-0094	14	70575-0013	25	70575-0024

▨ Highlighted area denotes preferred standard product. Usually available with shorter leadtimes.

• U.S. Standard Product, available through Molex franchised distributors.

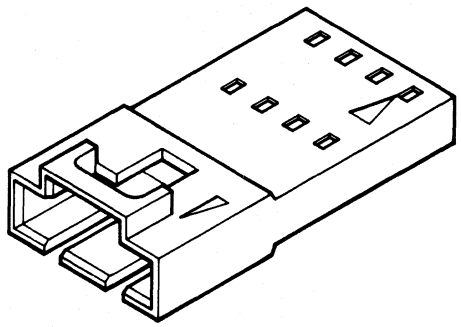
Single Row Wire-To-Wire Connector

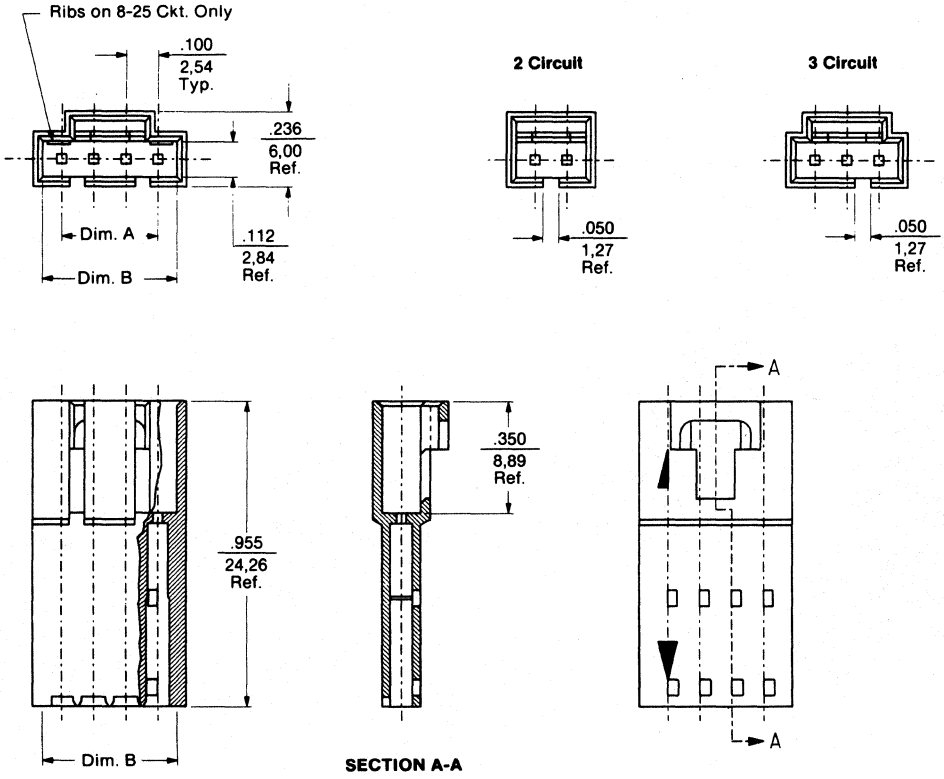
A

70107 Series

"A" Version

- Used primarily for remote interconnections
- Positive latch assures retention of receptacle connector
- Windows retain the male terminal's locking tangs
- Polarization slots prevent mating with male terminals at oblique angles
- Material-glass filled 94V-0 polyester
- Circuit sizes 2-25
- Version A - No mounting ears, wire-to-wire connection
- Mating - "G" housing 70066/ 70400 on the front end; 70021 discrete male crimp terminals in the back end





SECTION A-A

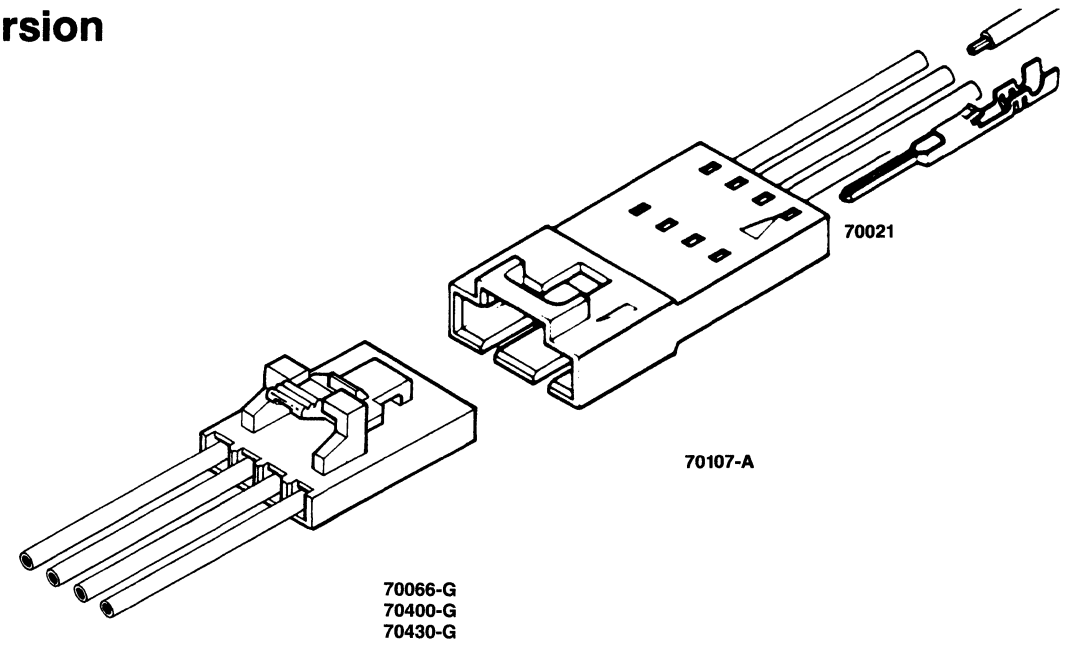
Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.220 5,59	8	.700 17,78	.820 20,83	14	1.300 33,02	1.420 36,07	20	1.900 48,26	2.020 51,31
3	.200 5,08	.320 8,13	9	.800 20,32	.920 23,37	15	1.400 33,56	1.520 38,61	21	2.000 50,80	2.120 53,85
4	.300 7,62	.420 10,67	10	.900 22,86	1.020 25,91	16	1.500 38,10	1.620 41,15	22	2.100 53,34	2.220 56,39
5	.400 10,16	.520 13,21	11	1.000 25,40	1.120 28,45	17	1.600 40,64	1.720 43,69	23	2.200 55,88	2.320 58,93
6	.500 12,70	.620 15,74	12	1.100 27,94	1.220 30,99	18	1.700 43,18	1.820 46,23	24	2.300 58,42	2.420 61,47
7	.600 15,24	.720 18,29	13	1.200 30,48	1.320 33,53	19	1.800 45,72	1.920 48,77	25	2.400 60,96	2.520 64,01

Single Row
Wire-To-Wire Connector

A

70107 Series
"A" Version



Ordering Information

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	• 70107-0001	7	• 70107-0006	12	• 70107-0011	17	• 70107-0016	22	• 70107-0021
3	• 70107-0002	8	• 70107-0007	13	• 70107-0012	18	• 70107-0017	23	• 70107-0022
4	• 70107-0003	9	• 70107-0008	14	• 70107-0013	19	• 70107-0018	24	• 70107-0023
5	• 70107-0004	10	• 70107-0009	15	• 70107-0014	20	• 70107-0019	25	• 70107-0024
6	• 70107-0005	11	• 70107-0010	16	• 70107-0015	21	• 70107-0020		

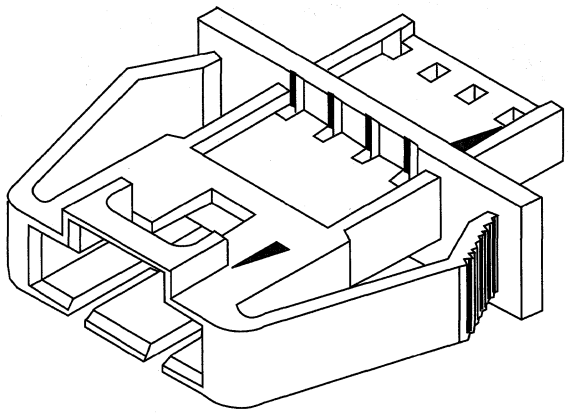
• U.S. Standard Product, available through Molex franchised distributors.

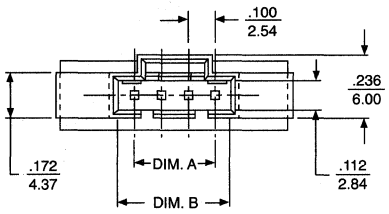
Single Row
Discrete Wire Panel Mount

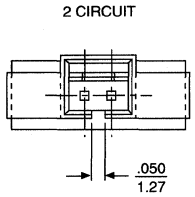
A

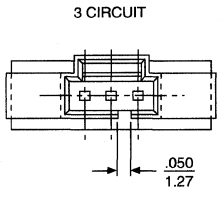
70107 Series
"B" Version

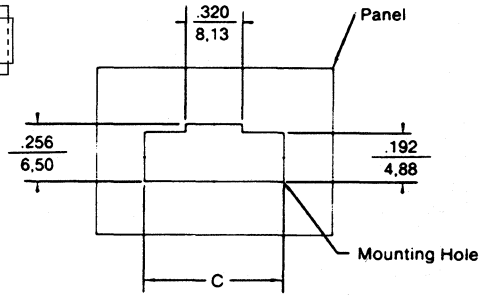
- Used primarily for remote interconnections
- Positive latch assures retention of receptacle connector
- Windows retain the male terminal's locking tangs
- Polarization slots prevent mating with male terminals at oblique angles
- Material, glass filled 94V-0 polyester
- Circuit sizes 2-25
- Version B – with mounting ears, insertable in .030" to .090" thick panels
- Mating – "G" housing 70066/70400 on the front end; 70021 discrete male crimp terminals in the back end



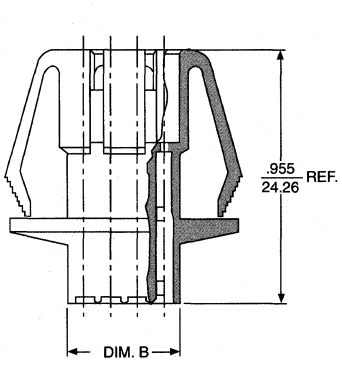


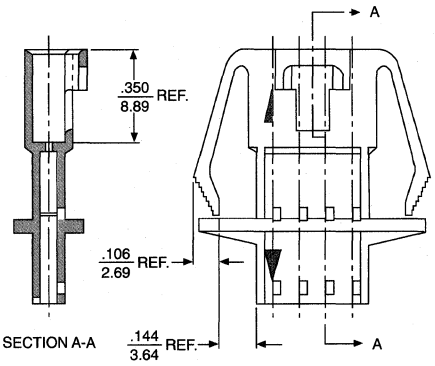






Recommended Mounting Hole Layout



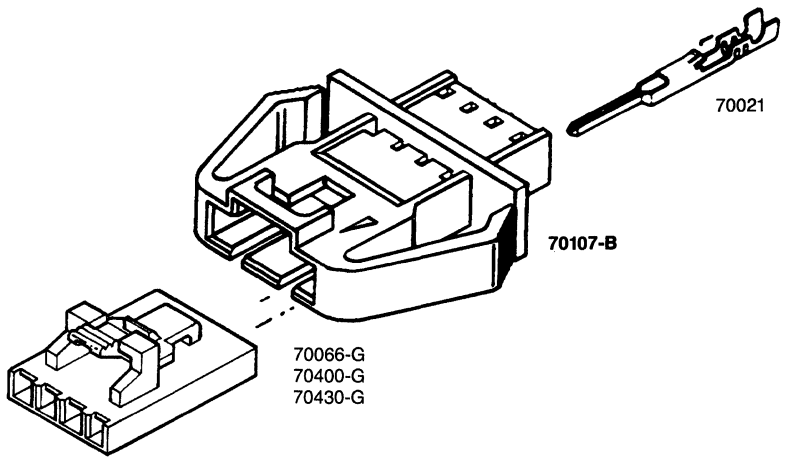


Dimensions

Circuits	Dim. A	Dim. B	Panel Opening Dim. C	Circiuts	Dim. A	Dim. B	Panel Opening Dim. C	Circuits	Dim. A	Dim. B	Panel Opening Dim. C
2	.100 2,54	.220 5,59	.515 13,08	10	.900 22,86	1.020 25,91	1.315 33,40	18	1.700 43,18	1.820 46,23	2.115 53,72
3	.200 5,08	.320 8,13	.615 15,62	11	1.000 25,40	1.120 28,45	1.415 35,94	19	1.800 45,72	1.920 48,77	2.215 56,26
4	.300 7,62	.420 10,67	.715 18,61	12	1.100 27,94	1.220 30,99	1.515 38,48	20	1.900 48,26	2.020 51,31	2.315 58,80
5	.400 10,16	.520 13,21	.815 20,70	13	1.200 30,48	1.320 33,53	1.615 41,02	21	2.000 50,80	2.120 53,85	2.415 61,34
6	.500 12,70	.620 15,74	.915 23,24	14	1.300 33,02	1.420 36,07	1.715 43,56	22	2.100 53,34	2.220 56,39	2.515 63,88
7	.600 15,24	.720 18,29	1.015 25,78	15	1.400 33,56	1.520 38,61	1.815 46,10	23	2.200 55,88	2.320 58,93	2.615 66,42
8	.700 17,78	.820 20,83	1.115 28,32	16	1.500 38,10	1.620 41,15	1.915 48,64	24	2.300 58,42	2.420 61,47	2.715 68,96
9	.800 20,32	.920 23,37	1.215 30,86	17	1.600 40,64	1.720 43,69	2.015 51,18	25	2.400 60,96	2.520 64,01	2.815 71,50

Single Row
Discrete Wire Panel Mount

70107 Series



Ordering Information

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	• 70107-0036	7	• 70107-0041	12	• 70107-0046	17	• 70107-0051	22	• 70107-0056
3	• 70107-0037	8	• 70107-0042	13	• 70107-0047	18	• 70107-0052	23	• 70107-0057
4	• 70107-0038	9	• 70107-0043	14	• 70107-0048	19	• 70107-0053	24	• 70107-0058
5	• 70107-0039	10	• 70107-0044	15	• 70107-0049	20	• 70107-0054	25	• 70107-0059
6	• 70107-0040	11	• 70107-0045	16	• 70107-0050	21	• 70107-0055		

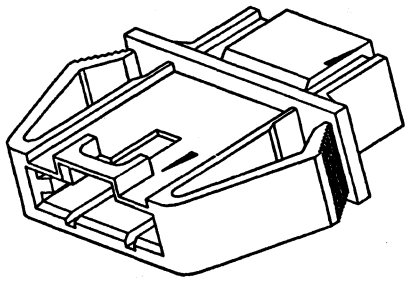
• U.S. Standard Product, available through Molex franchised distributors.

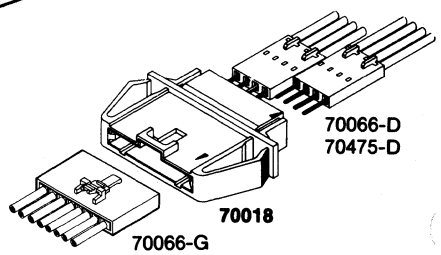
Single Row Panel Mount Connector Assemblies

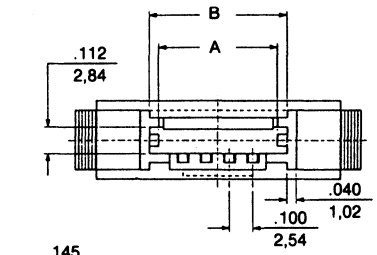
A

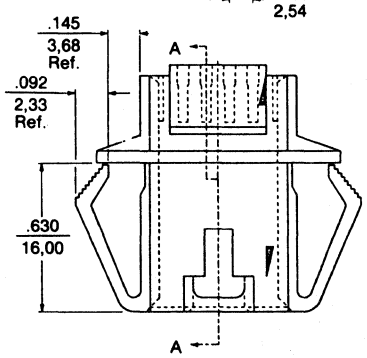
70018 Series

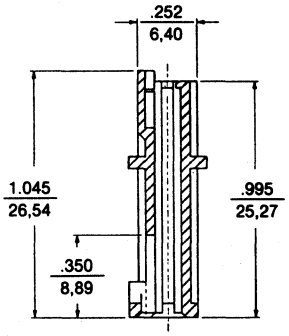
- Used primarily for remote interconnections
- Positive latch assures retention of receptacle connector
- Polarization slots prevent mating with male terminals at oblique angles
- Material, glass filled 94V-0 polyester
- Circuit sizes 2-25
- Mating - "G" housing 70066/70400 on the front end; "D" housing 70066/70475 on the back end
- Mounting ears for insertion into .030"-.090" thick panels



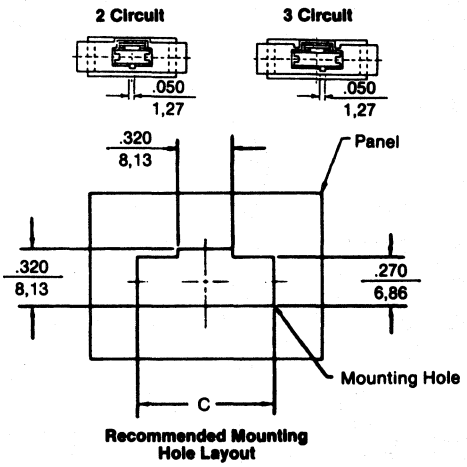




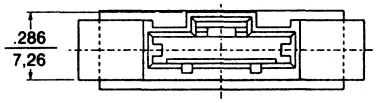




Section A-A



Recommended Mounting Hole Layout



Dimensions

Circuits	Dim. A	Dim. B	Panel Opening Dim. C	Circuits	Dim. A	Dim. B	Panel Opening Dim. C	Circuits	Dim. A	Dim. B	Panel Opening Dim. C
2	.210 5,33	.290 7,37	.625 15,87	10	1.010 25,65	1.090 27,69	1.425 36,19	18	1.810 45,97	1.890 48,01	2.225 56,51
3	.310 7,87	.390 9,91	.725 18,41	11	1.110 28,19	1.190 30,23	1.525 38,73	19	1.910 48,51	1.990 50,55	2.325 59,05
4	.410 10,41	.490 12,45	.825 20,95	12	1.210 30,73	1.290 32,77	1.625 41,27	20	2.010 51,05	2.090 53,09	2.425 61,59
5	.510 12,95	.590 14,99	.925 23,49	13	1.310 33,27	1.390 25,31	1.725 43,81	21	2.110 53,59	2.190 55,63	2.525 64,13
6	.610 15,49	.690 17,53	1.025 26,03	14	1.410 35,81	1.490 37,89	1.825 46,35	22	2.210 56,13	2.290 58,17	2.625 66,67
7	.710 18,03	.790 20,07	1.125 28,57	15	1.510 38,35	1.590 40,39	1.925 48,89	23	2.310 58,67	2.390 60,71	2.725 69,21
8	.810 20,57	.890 22,61	1.225 31,11	16	1.610 40,89	1.690 42,93	2.025 51,43	24	2.410 61,21	2.490 63,25	2.825 71,75
9	.910 23,11	.990 25,15	1.325 33,65	17	1.710 43,43	1.790 45,47	2.125 53,97	25	2.510 63,75	2.590 65,79	2.925 74,29

Ordering Information

• **Order No.** 50-65-02**XX**
Replace **XX** with number of circuits, 02-25

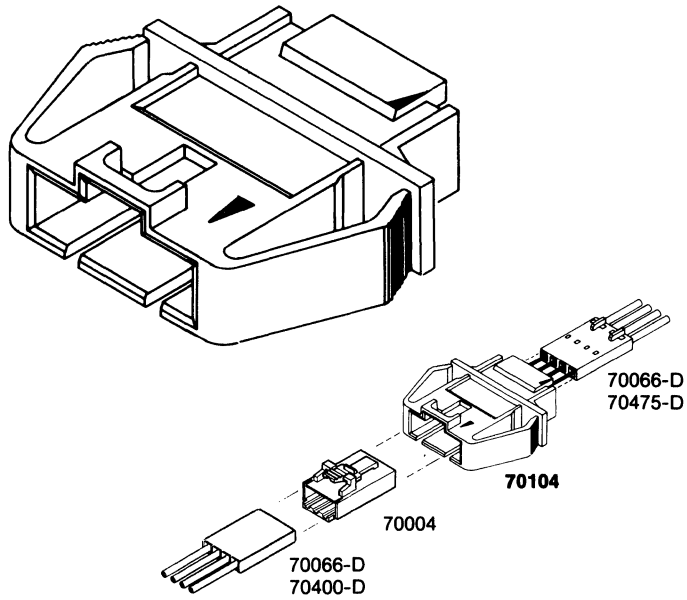
• U.S. Standard Product, available through Molex franchised distributors.

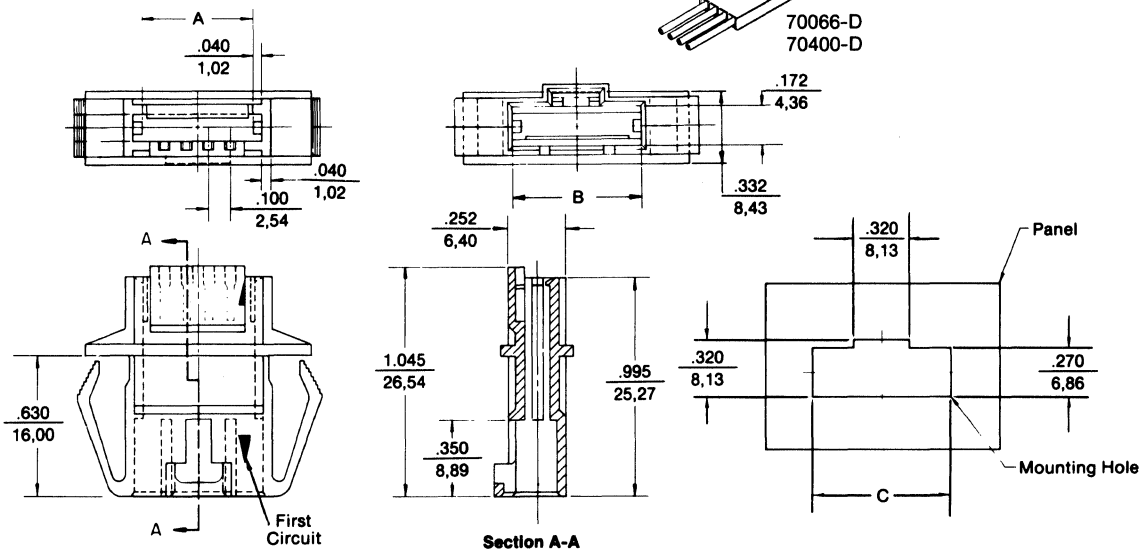
Single Row, Modular Branch Panel Mount

A

70104 Series

- Used primarily for remote interconnections
- Positive latch assures retention of receptacle connector
- Polarization slots prevent mating with male terminals at oblique angles
- Material, glass filled 94V-0 polyester
- Circuit sizes 4-25
- Mating - 70004 interim clip with "D" housing 70066/70400 on the front end; "D" housing 70066/70475 on the back end
- Mounting ears for insertion into .030"-.090" thick panels





Dimensions

Circuits	Dim. A	Dim. B	Panel Opening Dim. C	Circuits	Dim. A	Dim. B	Panel Opening Dim. C	Circuits	Dim. A	Dim. B	Panel Opening Dim. C
4	.410 10,41	.490 12,45	.825 20,95	12	1.210 30,73	1.290 32,77	1.625 41,27	19	1.910 48,51	1.990 50,55	2.325 59,05
5	.510 12,95	.590 14,99	.925 23,49	13	1.310 33,27	1.390 35,31	1.725 43,81	20	2.010 51,05	2.090 53,09	2.425 61,59
6	.610 15,49	.690 17,53	1.025 26,03	14	1.410 35,81	1.490 37,89	1.825 46,35	21	2.110 53,59	2.190 55,63	2.525 64,13
7	.710 18,03	.790 20,07	1.125 28,57	15	1.510 38,35	1.590 40,39	1.925 48,89	22	2.210 56,13	2.290 58,17	2.625 66,67
8	.810 20,57	.890 22,61	1.225 31,11	16	1.610 40,89	1.690 42,93	2.025 51,43	23	2.310 58,67	2.390 60,71	2.725 69,21
9	.910 23,11	.990 25,15	1.325 33,65	17	1.710 43,43	1.790 45,47	2.125 53,97	24	2.410 61,21	2.490 63,25	2.825 71,75
10	1.010 25,65	1.090 27,69	1.425 36,19	18	1.810 45,97	1.890 48,01	2.225 56,51	25	2.510 63,75	2.590 65,79	2.925 74,79
11	1.110 28,19	1.190 30,23	1.575 38,73								

Ordering Information

• Order No. 50-65-01**XX**
Replace **XX** with number of circuits, 04-25

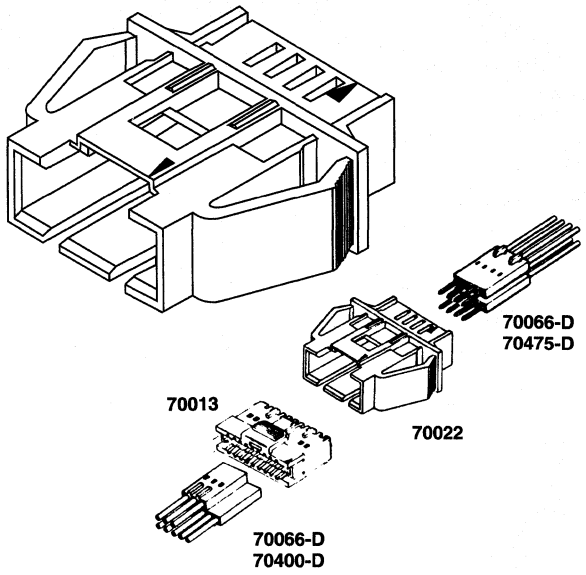
• U.S. Standard Product, available through Molex franchised distributors.

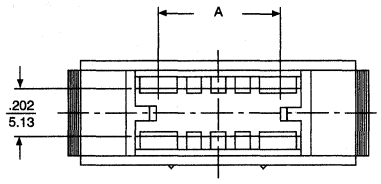
Dual Row, Modular Branch Panel Mount

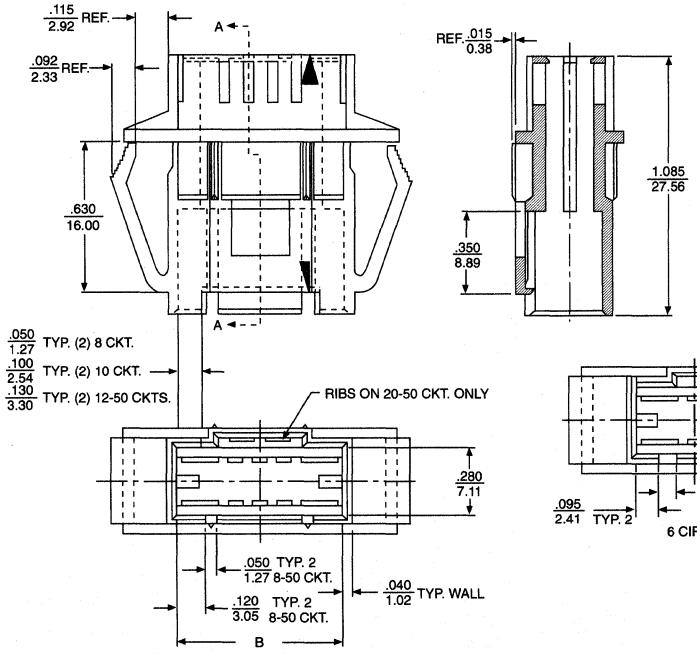
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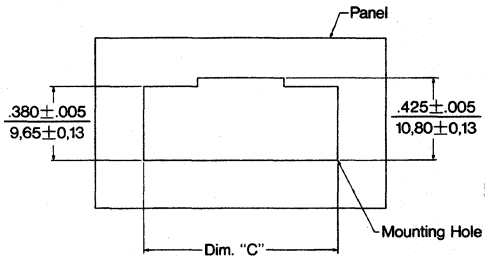
70022 Series

- Used primarily for high density remote interconnections
- Positive latch assures retention of receptacle connector
- Polarization slots prevent mating with male terminals at oblique angles
- Material, glass filled 94V-0 polyester
- Circuit sizes 6-50 (even numbers)
- Mating – 70013 interim clip with "D" housing 70066/70400 on the front end; "D" housing 70066/70475 on the back end.
- Mounting ears for insertion into .030"-.090" thick panels.









Recommended Mounting Hole Layout

Dimensions

Ckts.	Dim. A	Dim. B	Panel Opening Dim. C	Ckts.	Dim. A	Dim. B	Panel Opening Dim. C	Ckts.	Dim. A	Dim. B	Panel Opening Dim. C	Ckts.	Dim. A	Dim. B	Panel Opening Dim. C	Ckts.	Dim. A	Dim. B	Panel Opening Dim. C
6	.305 7,75	.490 12,45	.815 20,70	16	.805 20,45	.990 25,15	1.315 33,40	26	1.305 33,15	1.490 37,85	1.815 46,10	36	1.805 45,85	1.990 50,55	2.315 58,80	44	2.205 56,00	2.390 60,71	2.715 68,96
8	.405 10,29	.590 14,99	.915 23,24	18	.905 22,99	1.090 27,69	1.415 35,94	28	1.405 35,69	1.590 40,39	1.915 48,64	38	1.904 48,39	2.090 53,09	2.415 61,34	46	2.305 58,55	2.490 63,25	2.815 71,50
10	.505 12,83	.690 17,53	1.015 25,78	20	1.005 25,53	1.190 30,23	1.515 38,48	30	1.505 38,23	1.690 42,93	2.015 51,18	40	2.005 50,93	2.190 55,63	2.515 63,88	48	2.405 61,09	2.590 65,79	2.915 74,04
12	.605 15,37	.790 20,07	1.115 28,32	22	1.105 28,07	1.290 32,77	1.615 41,02	32	1.605 40,77	1.790 45,47	2.115 53,72	42	2,105 53,47	2.290 58,17	2.615 66,42	50	2.505 63,63	2.690 68,33	3.015 76,58
14	.705 17,91	.890 22,61	1.215 30,86	24	1.205 30,61	1.390 35,31	1.715 43,56	34	1.705 43,31	1.890 48,01	2.215 56,26								

Ordering Information

Order No. • 50-65-00XX
Replace "XX" with number of circuits, 06-50 (even numbers only)

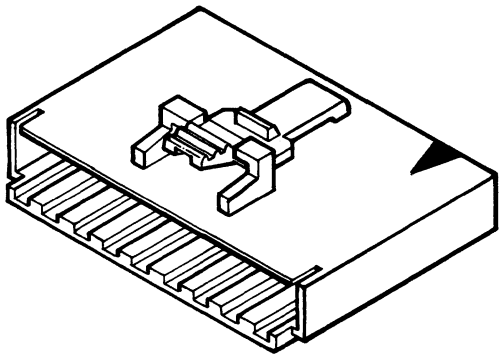
Exception: 44 circuit part order number is 50-65-0051
• U.S. Standard Product, available through Molex franchised distributors.

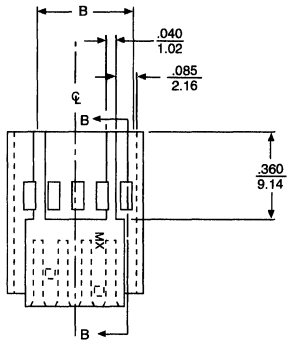
Single Row Interim Clip

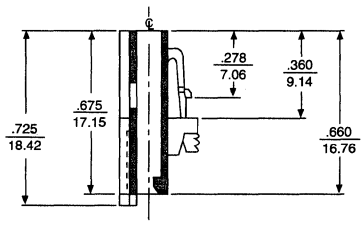
A

70004 Series

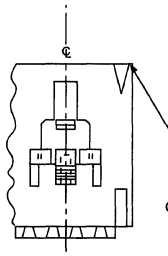
- Positive latch retains clip to panel mount or single row headers
- Material – glass filled 94V-0 polyester
- Circuit sizes 4-25
- Mating – "D" housing 70066/70400 in the back end; front end locks into 70104 panel mount or 70563/65/73/75 headers
- Anti-entaglement/overstress ribs prevent discrete wires from catching under latch during harness manufacturing and storage

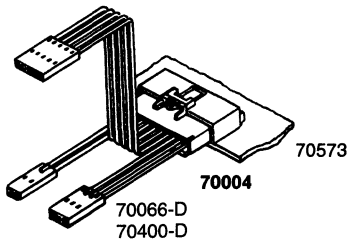


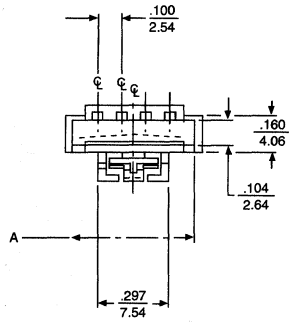


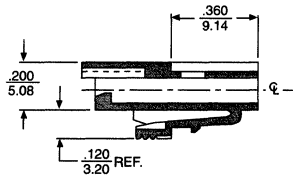


SECTION B-B









SECTION A-A

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.410 10,41	.300 7,62	10	1.010 25,65	.900 22,86	16	1.610 40,89	1.500 38,10	21	2.110 53,59	2.000 50,80
5	.510 12,95	.400 10,16	11	1.110 28,19	1.000 25,40	17	1.710 43,43	1.600 40,64	22	2.210 56,13	2.100 53,34
6	.610 15,49	.500 12,70	12	1.210 30,73	1.100 27,94	18	1.810 45,97	1.700 43,18	23	2.310 58,67	2.200 55,88
7	.710 18,03	.600 15,24	13	1.310 33,27	1.200 30,48	19	1.910 48,51	1.800 45,72	24	2.410 61,21	2.300 58,42
8	.810 20,57	.700 17,78	14	1.410 35,81	11.300 33,02	20	2.010 51,05	1.900 48,26	25	2.510 63,75	2.400 60,96
9	.910 23,11	.800 20,32	15	1.510 38,35	1.400 35,56						

Ordering Information

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	• 15-04-5042	8	• 15-04-5082	12	• 15-04-5122	16	• 15-04-5162	20	• 15-04-5202	23	• 15-04-5232
5	• 15-04-5052	9	• 15-04-5092	13	• 15-04-5132	17	• 15-04-5172	21	• 15-04-5212	24	• 15-04-5242
6	• 15-04-5062	10	• 15-04-5102	14	• 15-04-5142	18	• 15-04-5182	22	• 15-04-5222	25	• 15-04-5252
7	• 15-04-5072	11	• 15-04-5112	15	• 15-04-5152	19	• 15-04-5192				

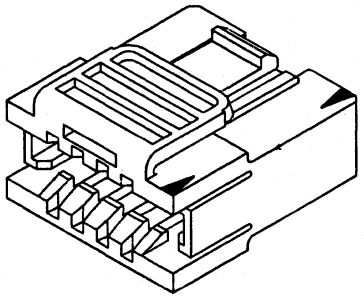
• U.S. Standard Product, available through Molex franchised distributors.

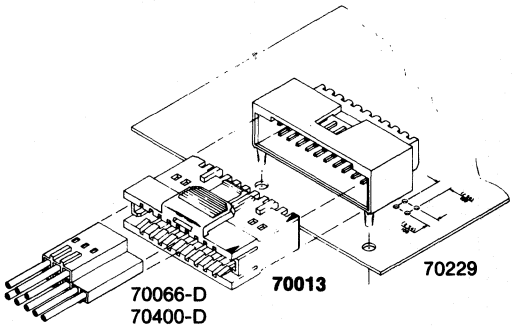
Dual Row Interim Clip

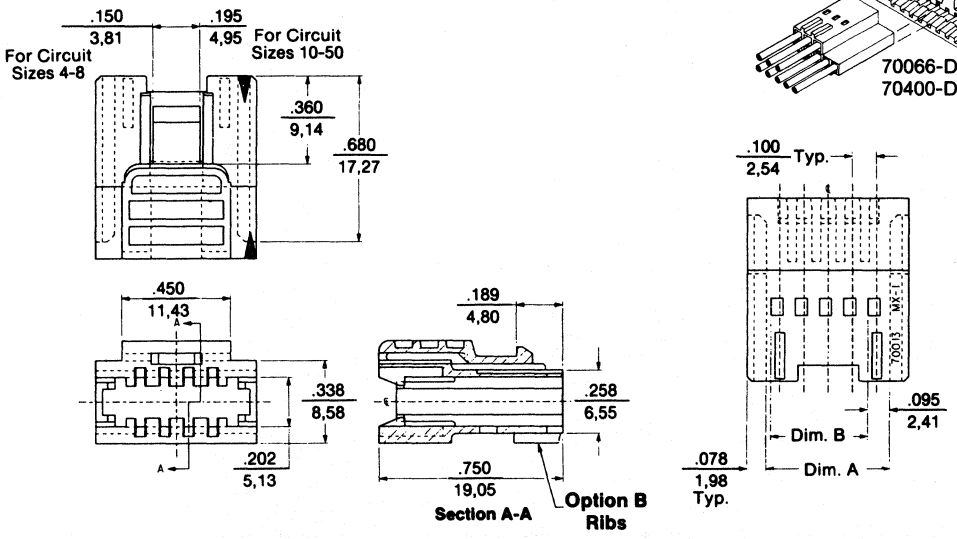
A

70013 Series

- Positive latch retains clip to panel mount or dual row header
- Material - Glass filled 94V-0 polyester
- Circuit Sizes 6 thru 50
- Mating - "D" housing 70066 / 70400 in the back end; front end locks into 70022 panel mount or 8723 / 24 Version "E" & "F", 70227 / 29 headers
- Optional polarization rib available (version "B")







Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
6	.310 7,87	.200 5,08	14	.710 18,03	.600 15,24	22	1.110 28,19	1.000 25,40	30	1.510 38,35	1.400 35,56	38	1.910 48,51	1.800 45,72	46	2.310 58,67	2.200 55,88
8	.410 10,41	.300 7,62	16	.810 20,57	.700 17,78	24	1.210 30,73	1.100 27,94	32	1.610 40,89	1.500 38,10	40	2.010 51,05	1.900 48,26	48	2.410 61,21	2.300 58,42
10	.510 12,95	.400 10,16	18	.910 23,11	.800 20,32	26	1.310 33,27	1.200 30,48	34	1.710 43,43	1.600 40,64	42	2.110 53,59	2.000 50,80	50	2.510 63,75	2.400 60,96
12	.610 15,49	.500 12,70	20	1.010 25,65	.900 22,86	28	1.410 35,81	1.300 33,02	36	1.810 45,97	1.700 43,18	44	2.210 56,13	2.100 53,34			

Ordering Information

Version A (without ribs) Order No. • 15-04-5**XX**1
Version B (with ribs) Order No. • 15-04-5**XX**4
Replace **XX** with number of circuits, 06-50 (even numbers only)

• U.S. Standard Product, available through Molex franchised distributors.

Specifications for Unshrouded and Shrouded Headers

□ For use with .062", .093" / .125" thick printed circuit boards

Electrical:
Current rating – 3 amps
Insulation Resistance – 1,000 megohms
Dielectric Strength – 600 VAC r.m.s. for 1 minute

Environmental:
Operating Temperature – -40°C — +105°C

Mechanical:
Min. Pushout Force – 4 lbs.

Platings:

No. 1 – 15 µ in. min. gold in select area over 50 µ in. min. nickel overall, with 75 µ in. min. electro-tin/lead in select area.

No. 2 – 30 µ in. min. gold in select area over 50 µ in. min. nickel plate overall, with 75 µ in. min. electro-tin/lead in select area.

No. 3 – 150 µ in. tin/lead over 50 µ in. nickel overall.

UL Listed, CSA certified

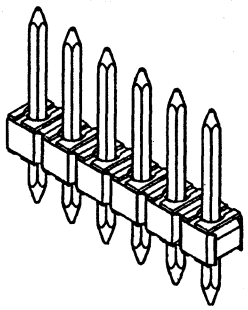
Material:

Product Eng. No.	INSULATOR		PIN	
	G.F. Nylon	G.F. Polyester	Brass	Phosphor Bronze
70345	√			√
8624		√		√
70260		√		√
70203		√		√
70216		√		√
70268		√		√
8723		√		√
8724	√			√
70227		√		√
70229		√		√
70204		√		√
5547		√	√	
5548		√	√	
70287		√		√
70524		√		√
70299	√	√		√

.100" 2,54mm Center Breakaway Headers

A

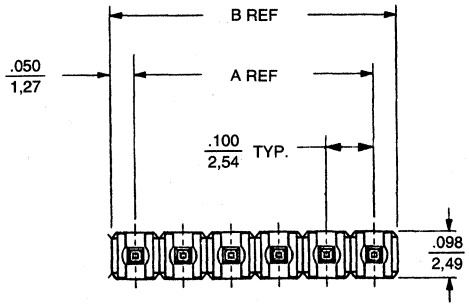
42375
Straight Flat Header

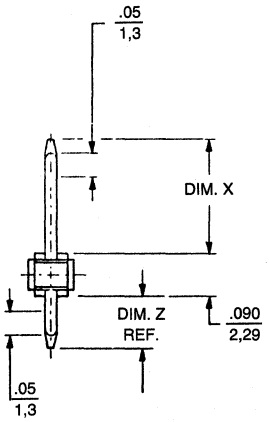


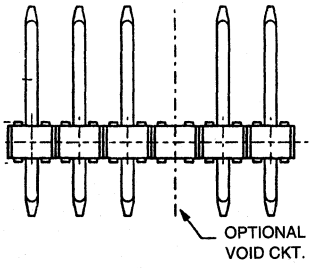
- 2-36 Circuits
- .025" 0,64mm square phosphor bronze pins
- 94V-0 G. F. nylon insulator
- Mates with Molex .100" 2,54mm centerline connectors

Mating Connectors

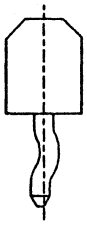
2695	7880	70430
4455	40556	90147
7690	41765	90148
7720	70066A	
7859	70400A	

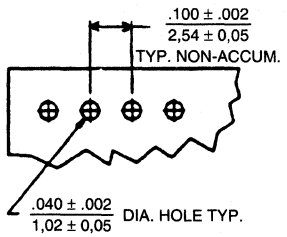






KINKED PIN DETAIL





PCB LAYOUT

Dimensions

Circuits	Dim. A*	Dim. B*
2	.100 2,54	.200 5,08
3	.200 5,08	.300 7,62

* For circuit size 4 through 36 add .100" or 2,54mm for each additional pin.

Ordering Information Note: Dim. X = Mating End Dim. Z = P.C. Tail

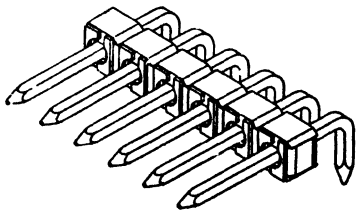
Plating Options	Dim. X– .240" 6,09 mm Dim. Z– .125" 3,18 mm	Dim. X– .240" 6,09 mm Dim. Z– .135" 3,43 mm Kinked P.C. Tail	Dim. X– .285" 7,40 mm Dim. Z– .120" 3,05 mm	Dim. X– .285" 7,40 mm Dim. Z– .135" 3,43 mm Kinked P.C. Tail	Dim. X– .320" 8,13 mm Dim. Z– .130" 3,05 mm	Dim. X– .320" 8,13 mm Dim. Z– .135" 3,43 mm Kinked P.C. Tail
Tin	•22-28-4**XX**0	22-28-5**XX**0	•22-28-4**XX**2	22-28-5**XX**2	•22-28-4**XX**1	22-28-5**XX**1
15m Select Gold	•22-28-4**XX**3	22-28-5**XX**3	•22-28-4**XX**5	22-28-5**XX**5	•22-28-4**XX**4	22-28-5**XX**4
30m Select Gold	•22-28-4**XX**8	22-28-5**XX**8	•22-28-4**XX**8	22-28-5**XX**8	•22-28-4**XX**7	22-28-5**XX**7
Replace **"XX"** with number of circuits, 02-36						

• U.S. Standard Products available through Molex franchised distributors. (36 circuit only)

.100" 2,54mm Center Breakaway Headers

A

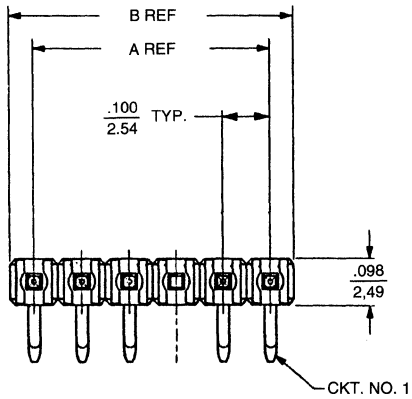
42377
Right Angle Flat Header

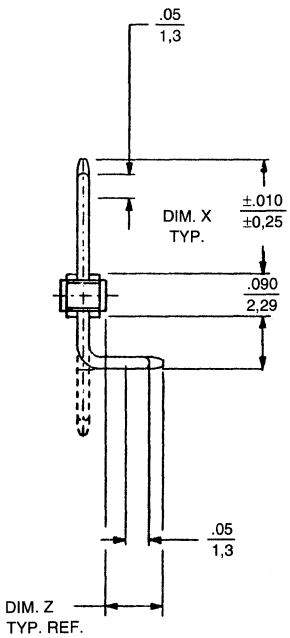


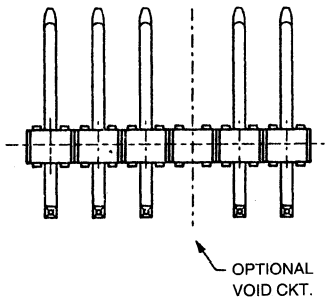
- 2-36 Circuits
- .025" 0,64mm square phosphor bronze pins
- 94V-0 G. F. nylon insulator
- Mates with Molex .100" 2,54mm centerline connectors

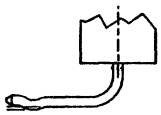
Mating Connectors

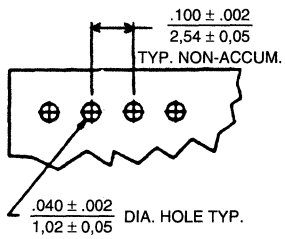
2695	7880	70430
4455	40556	90147
7690	41765	90148
7720	70066A	
7859	70400A	











PCB LAYOUT

Dimensions

Circuits	Dim. A*	Dim. B*
2	.100 2,54	.200 5,08
3	.200 5,08	.300 7,62

* For circuit size 4 through 36 add .100" or 2,54mm for each additional pin.

Ordering Information 42377 Note: Dim. X = Mating End Dim. Z = P.C. Tail

Plating Options	Dim. X– .244" 6,20 mm Dim. Z– .120" 3,05 mm	Dim. X– .244" 6,20 mm Dim. Z– .135" 3,43 mm Kinked P.C. Tail	Dim. X– .324" 8,23 mm Dim. Z– .120" 3,05 mm	Dim. X– .324" 8,23 mm Dim. Z– .135" 3,43 mm Kinked P.C. Tail
Tin	• 22-28-8**XX**0	22-28-9**XX**0	• 22-28-8**XX**1	22-28-9**XX**1
15m Select Gold	• 22-28-8**XX**2	22-28-9**XX**2	• 22-28-8**XX**3	22-28-9**XX**3
30m Select Gold	• 22-28-8**XX**4	22-28-9**XX**4	• 22-28-8**XX**5	22-28-9**XX**5
Replace **"XX"** with number of circuits, 02-36				

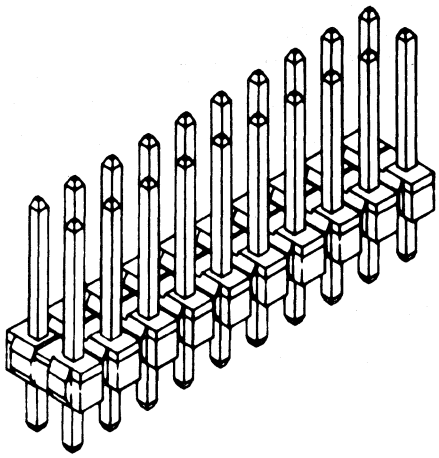
• U.S. Standard Products available through Molex franchised distributors. (36 circuit only)

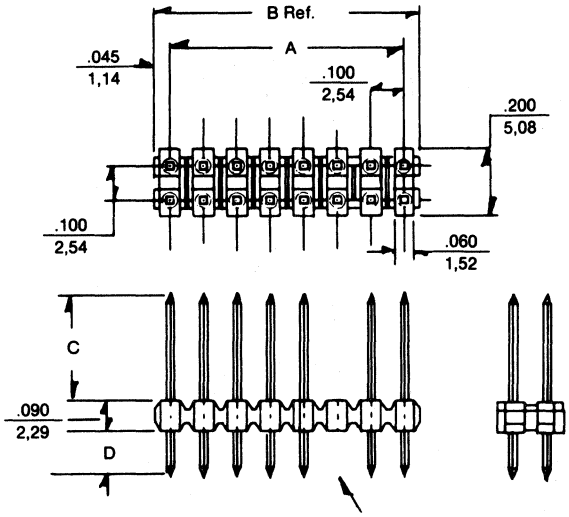
Dual Row Straight Pin Breakaway Header

A

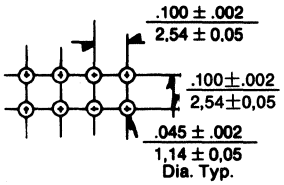
8624 Series

- **Mates** with female connectors on .100" grid
  - Single and dual row PCB connectors: e.g. 70192, 7990
  - Single & dual row IDT connectors: e.g. 70400-A, 70451-A
  - Single & dual row crimp connectors: e.g. 70066-A, 70450-A
  - Ribbon cable connectors: e.g. 40312
  - Flat flexible connectors: e.g. 70430-A, 40556
  - Shunts: e.g. 7859, 90059
- **Stackable** side-to-side and end-to-end (on unbroken edges)
- **Easy breakaway** to smaller sizes
- **Circuit sizes** 4-80
- **Standoffs** facilitate post solder cleaning
- **Drawn .025" square wire** provides 4-sided smooth surface for quality interface
- **For high temperature version** contact factory. Engineering Series 70280





Selective Voids Available



Recommended P.C. Board Hole Layout

Dimensions 8624

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
4	.100 2,54	.190 4,83	6	.200 5,08	.290 7,37
*For circuit sizes 8 through 80 add .100" or 2,54mm for each additional pin position					

Ordering Information NOTE: Dim. C = Mating End Dim. D = P.C. Tail

Plating Option	Mating End Dim. C - .240" (6,10) P.C. Tail Dim. D - .110" (2,80) Order No.	Mating End Dim. C - .320" (8,13) P.C. Tail Dim. D - .110" (2,80) Order No.
15 microinches min. select gold	•10-89-1**XX**1	•10-89-1**XX**3
30 microinches min. select gold	•10-89-2**XX**1	•10-89-2**XX**3
150 microinches tin/lead, nickel overall	•10-88-1**XX**1	•10-88-1**XX**3
Replace "**XX**" with number of circuits, 04-80 (even numbers only). For 2-circuit, order 70343		

• U.S. Standard Product, available through Molex franchised distributors, is the **80 circuit version.**

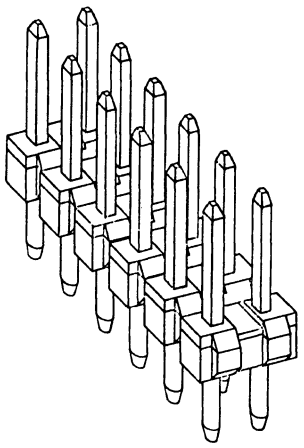
Dual Row Straight Pin Breakaway Header

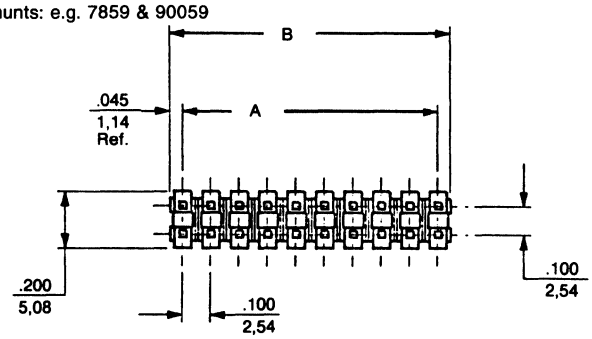
A

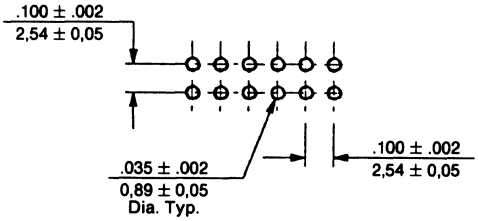
70260 Series

Square/Round Pin

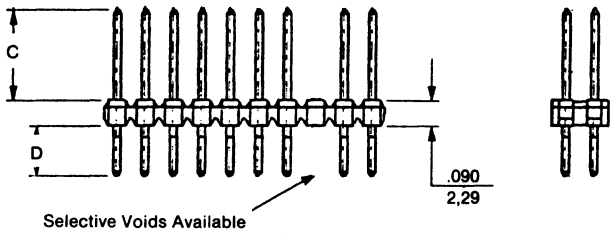
- **Insertable into .035" P.C. hole: aides robotic insertion**
- **Mates** with .100" grid female connectors
  - PCB connectors: e.g. 70192 & 7990
  - Single & dual row connectors: e.g. 70400-A, 70451-A
  - Dual & single row crimp connectors: e.g. 70450-A, 70066-A
  - Ribbon cable connectors: e.g. 40312
  - Flat flexible cable connectors: e.g. 70430-A & 40556
  - Shunts: e.g. 7859 & 90059
- **Stackable** side-to-side and end-to-end (on unbroken edges)
- **Easy breakaway** to small sizes
- **Circuit sizes** 4-80
- **Standoffs** facilitate post solder cleaning
- **Drawn .025" square/round** wire provides 4-sided smooth surface for quality interface







Recommended P.C. Board Hole Layout



Dimensions

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
4	.100 2,54	.190 4,83	6	.200 5,08	.290 7,37
*For circuit sizes 8 through 80 add .100" or 2,54mm for each additional pin position					

Ordering Information NOTE: Dim. C = Mating End Dim. D = P.C. Tail

Plating Option	Mating End Dim. C - .240" (6,10) P.C. Tail Dim. D - .110" (2,80) Order No.	Mating End Dim. C - .320" (8,13) P.C. Tail Dim. D - .110" (2,80) Order No.
15 microinches min. select gold	•10-89-6**XX**4	•10-89-6**XX**5
30 microinches min. select gold	•10-89-6**XX**8	•10-89-6**XX**9
150 microinches tin/lead, nickel overall	•10-89-6**XX**0	•10-89-6**XX**1
Replace "**XX**" with number of circuits, 04-80 (even numbers only)		

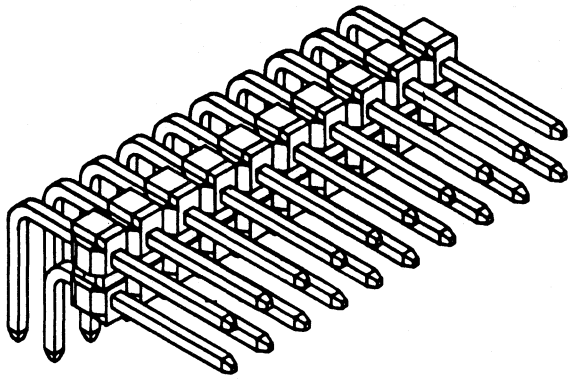
• U.S. Standard Product, available through Molex franchised distributors, is the **80 circuit version.**

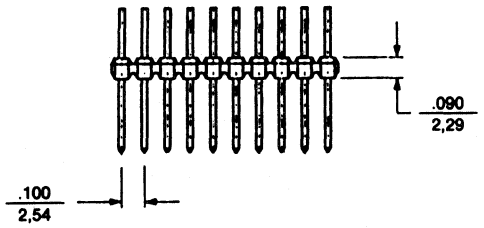
Low Profile Dual Row Right Angle Breakaway Header

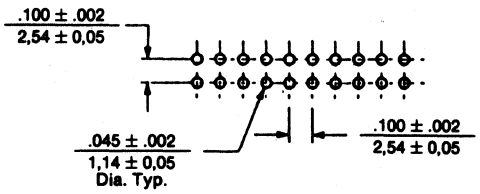
A

70203 Series

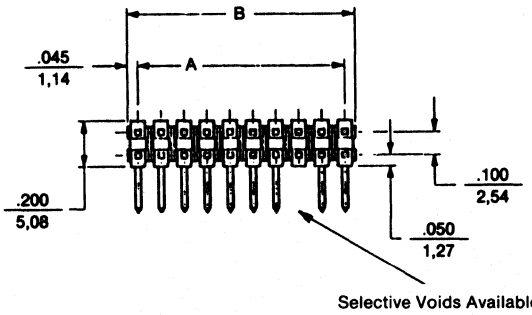
- **Low profile: .200"** high
- **Mates** with .100" grid female connectors:
  - PCB connectors: e.g. 70192
  - Single & dual row IDT connectors: e.g. 70400-A, 70451-A
  - Dual & single row crimp connectors: e.g. 70450-A, 70066-A
  - Ribbon cable connectors: e.g. 70121
  - Flat flexible cable connectors: e.g. 70430-A & 40556
  - Shunts: e.g. 7859 & 90059
- **Stackable** end-to-end (on unbroken edges)
- **Easy breakaway** to smaller sizes
- **Circuit sizes** 4-80
- **Standoffs** facilitate post solder cleaning
- **Drawn .025" square wire** provides 4-sided smooth surface for quality interface

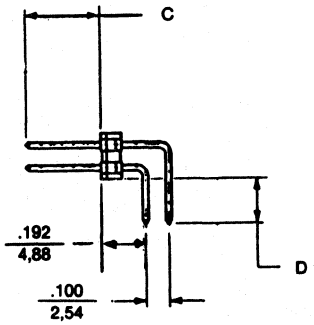






Recommended P.C. Board Hole Layout





Dimensions

In the Far East, this product has different Eng. Nos. and Order Nos. Contact factory for sales drawings on 70294-XXXX.

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
4	.100 2,54	.190 4,83	6	.200 5,08	.290 7,37
*For circuit sizes 8 through 80 add .100" or 2,54mm for each additional pin position					

Ordering Information NOTE: Dim. C = Mating End Dim. D = P.C. Tail

Plating Option	Mating End Dim. C - .240" (6,10) P.C. Tail Dim. D - .110" (2,80) Order No.	Mating End Dim. C - .320" (8,13) P.C. Tail Dim. D - .110" (2,80) Order No.
15 microinches min. select gold	•10-89-1**XX**6	•10-89-1**XX**7
30 microinches min. select gold	•10-89-2**XX**6	•10-89-2**XX**7
150 microinches tin/lead, nickel overall	•10-88-1**XX**5	•10-88-1**XX**6
Replace **"XX"** with number of circuits, 04-80 (even numbers only). For 2-circuit, order 70344		

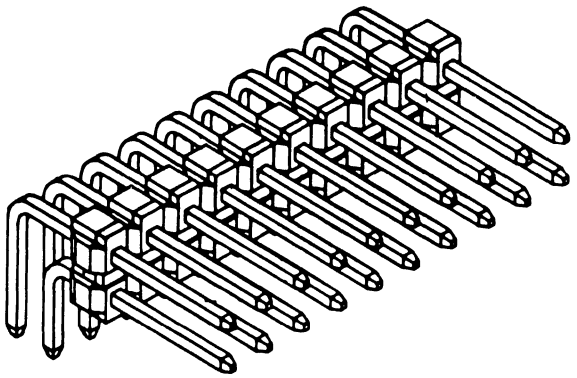
• U.S. Standard Product, available through Molex franchised distributors, is the **80 circuit version.**

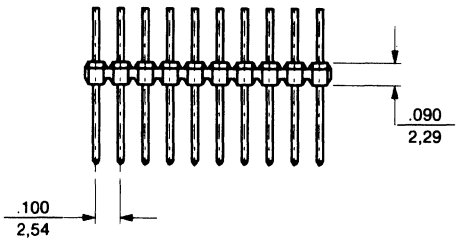
High Profile Dual Row Right Angle Breakaway Header

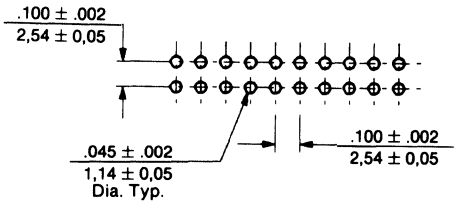
A

70216 Series

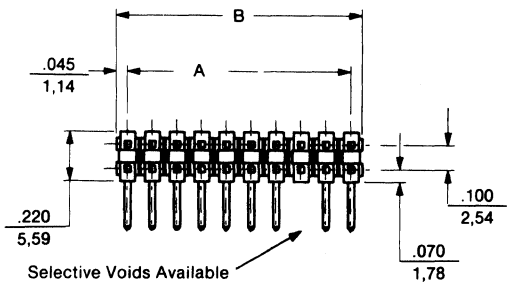
- **High profile: .220"** high
- **Mates** with .100" grid female connectors:
  - PCB connectors: e.g. 70192
  - Single & dual row IDT connectors: e.g. 70400-A, 70451-A
  - Dual & single row crimp connectors: e.g. 70450-A, 70066-A
  - Ribbon cable connectors: e.g. 40312
  - Flat flexible cable connectors: e.g. 70430 & 40556
  - Shunts: e.g. 7859 & 90059
- **Stackable** end-to-end (on unbroken edges)
- **Easy breakaway** to smaller sizes
- **Circuit sizes** 4-80
- **Standoffs** facilitate post solder cleaning
- **Drawn .025" square wire** provides 4-sided smooth surface for quality interface

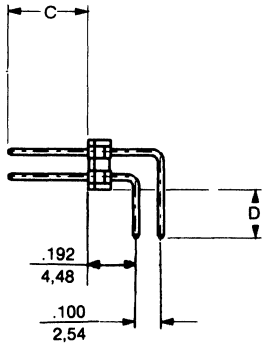






Recommended P.C. Board Hole Layout





inches
mm

Dimensions

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
4	.100 2,54	.190 4,83	6	.200 5,08	.290 7,37
*For circuit sizes 8 through 80 add .100" or 2,54mm for each additional pin position					

Ordering Information NOTE: Dim. C = Mating End Dim. D = P.C. Tail

Plating Option	Mating End Dim. C - .240" (6,10) P.C. Tail Dim. D - .110" (2,80) Order No.	Mating End Dim. C - .320" (8,13) P.C. Tail Dim. D - .110" (2,80) Order No.
15 microinches min. select gold	•10-89-4XX2	•10-89-4XX3
30 microinches min. select gold	•10-89-4XX6	•10-89-4XX7
150 microinches tin/lead, nickel overall	•10-88-3XX1	•10-88-3XX2
Replace "XX" with number of circuits, 04-80 (even numbers only)		

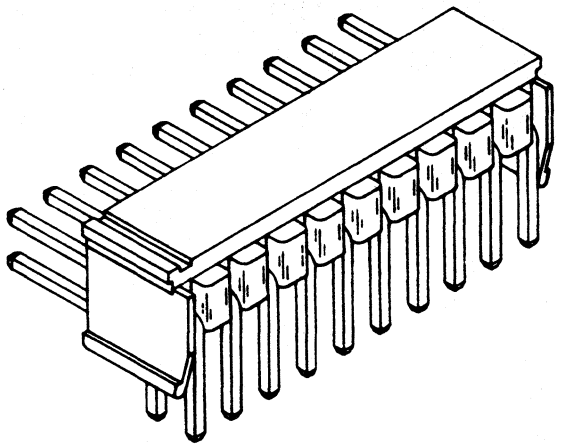
• U.S. Standard Product, available through Molex franchised distributors, is the **80 circuit version.**

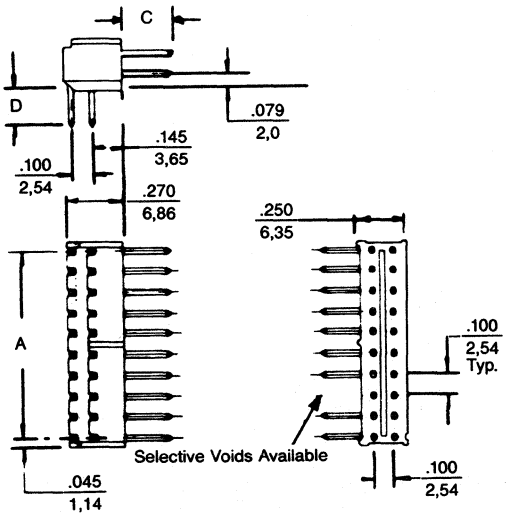
Dual Row Non-Breakaway Right Angle Header

A

70206 Series

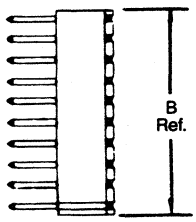
- **Mates** with .100" grid female connectors:
  - PCB connectors: e.g. 70192
  - Single and dual row IDT connectors: e.g. 70400-A, 70451-A
  - Dual & single row crimp connectors: e.g. 70450-A, 70066-A
  - Ribbon cable connectors: e.g. 40312
  - Flat flex cable connectors: e.g. 70430-A & 40556
  - Shunt: e.g. 7859 & 90059
- **Stackable** end-to-end
- **Circuit sizes** 4-80
- **Extremely stable on board** during wave soldering
- **Standoffs** facilitate post solder cleaning
- **Drawn .025" square wire** provides 4-sided smooth surface for quality interface





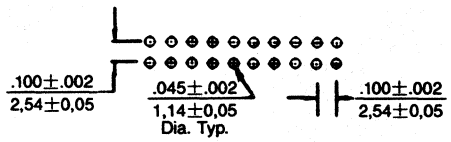
Bottom View

Front View



Top View

Recommended P.C. Board Hole Layout



Dimensions 70206

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
4	.100 2,54	.190 4,83	6	.200 5,08	.290 7,37
*For circuit sizes 8 through 80 add .100" or 2,54mm for each additional pin position					

Ordering Information NOTE: Dim. C = Mating End Dim. D = P.C. Tail

Plating Option	Mating End Dim. C - .240" (6,10) P.C. Tail Dim. D - .110" (2,80) Order No.	Mating End Dim. C - .320" (8,13) P.C. Tail Dim. D - .110" (2,80) Order No.
15 microinches min. select gold	•10-91-1XX1	•10-91-1XX3
30 microinches min. select gold	•10-91-2XX1	•10-91-2XX3
150 microinches tin/lead, nickel overall	•10-90-1XX1	•10-90-1XX3
Replace "XX" with number of circuits, 04-80 (even numbers only)		

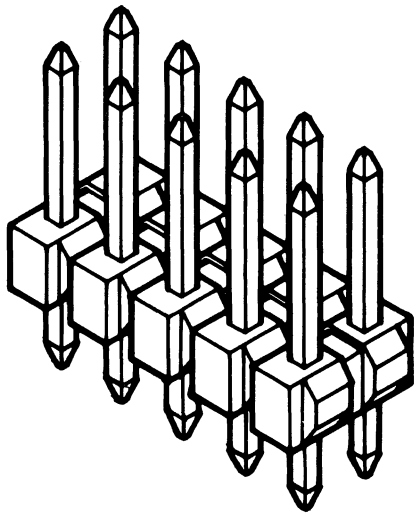
• U.S. Standard Product, available through Molex franchised distributors.

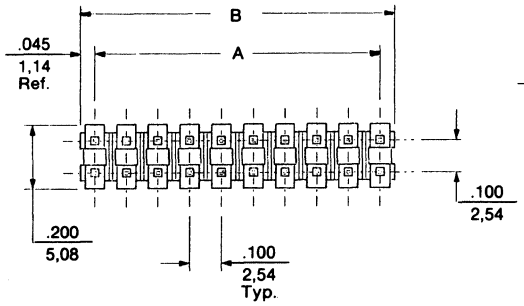
Dual Row Breakaway Retention Pin Header

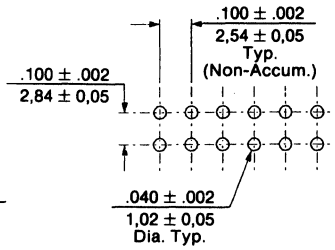
A

70287 Series
Straight Pin Version

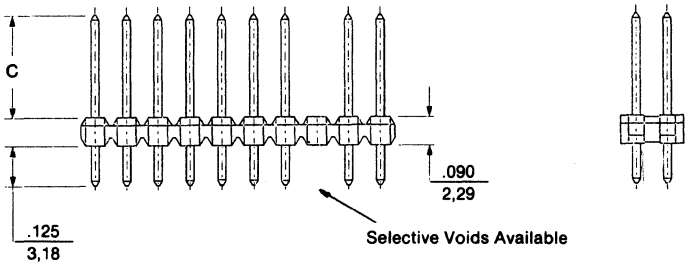
- **Kinked p.c. tail for retention to the board**
- **Mates** with female connectors on .100" (2,54mm) grid:
  - Single and dual row PCB connectors, e.g. 70192, 7990
  - Single and dual row IDT connectors, e.g. 70400-A, 70451-A
  - Single and dual row crimp connectors, e.g. 70312
  - Flat flexible cable connectors, e.g 70430-A, 40556
  - Shunts, e.g. 7859, 90059
- **Stackable** side-by-side and end-to-end (on unbroken edges)
- **Easy breakaway** to smaller sizes
- **Circuit sizes** 2-80
- **Standoffs** facilitate post solder cleaning
- **Drawn .025" square wire** provides 4-sided smooth surface for quality interface







Recommended P.C. Board Hole Layout



Dimensions

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
4	.100 2,54	.190 4,83	6	.200 5,08	.290 7,37
*For circuit sizes 8 through 80 add .100" or 2,54mm for each additional pin position					

Ordering Information NOTE: Dim. C = Mating End

Plating Option	Mating End Dim. C - .240" (6,10) Order No.	Mating End Dim. C - .320" (8,13) Order No.
15 microinches min. select gold	10-96-7XX5	10-96-7XX6
30 microinches min. select gold	10-96-7XX7	10-96-7XX8
150 microinches tin/lead, nickel overall	10-96-7XX3	10-96-7XX4
Replace **XX** with number of circuits, 02-80 (even numbers only)		

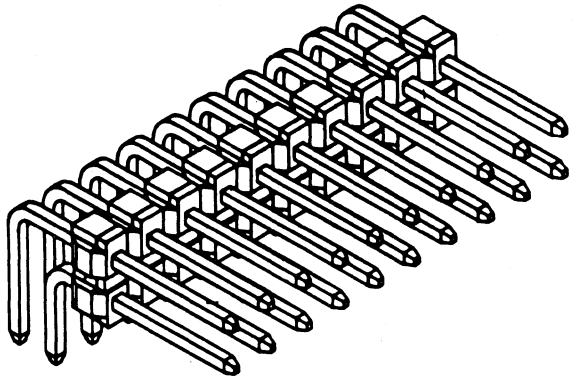
Dual Row Breakaway Retention Pin Header

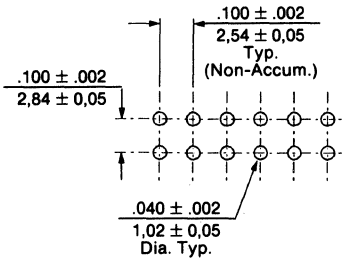
A

70524 Series

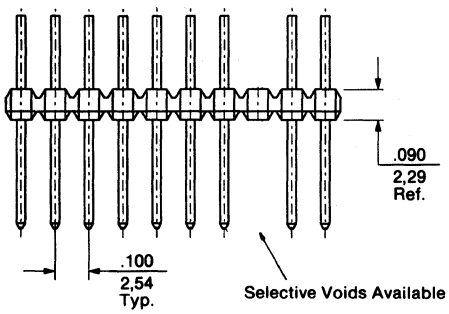
Low Profile: .200" High Right Angle Pin Version

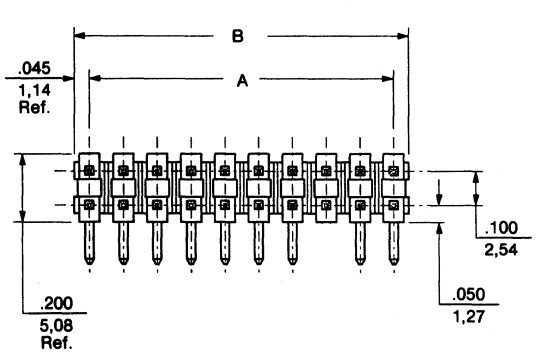
- **Kinked p.c. tail for retention to the board**
- **Mates** with .100" (2,54mm) grid female connectors
  - PCB connectors, e.g. 70192
  - Single and dual row insulation displacement connectors, e.g. 70400-A, 70451-A
  - Single & dual row crimp connectors, e.g. 70450-A, 70066-A
  - Ribbon cable connectors, e.g. 70121
  - Flat flexible cable connectors, e.g. 70430-A, 70556
  - Shunts, e.g. 7859, 90059
- **Stackable** end-to-end (on unbroken edges)
- **Easy breakaway** to smaller sizes
- **Standoffs** facilitate post solder cleaning
- **Drawn .025" square wire** provides 4-sided smooth surface for quality interface

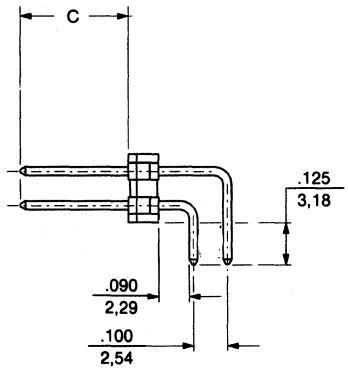




Recommended P.C. Board Hole Layout







Dimensions

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
4	.100 2,54	.190 4,83	6	.200 5,08	.290 7,37
*For circuit sizes 8 through 80 add .100" or 2,54mm for each additional pin position					

Ordering Information NOTE: Dim. C = Mating End

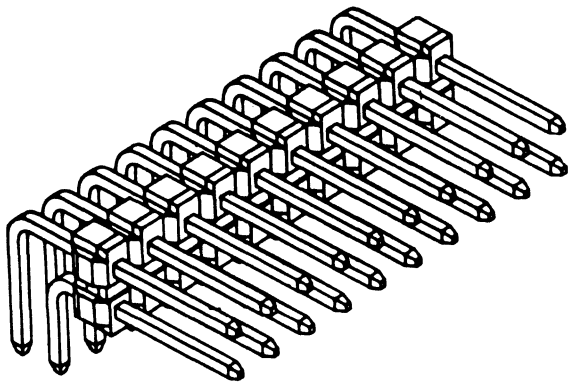
Plating Option	Mating End Dim. C - .240" (6,10) Order No.	Mating End Dim. C - .320" (8,13) Order No.
15 microinches min. select gold	10-96-9**XX**7	10-96-9**XX**8
30 microinches min. select gold	10-96-9**XX**9	10-96-4**XX**7
150 microinches tin/lead, nickel overall	10-96-9**XX**5	10-96-9**XX**6
Replace "**XX**" with number of circuits, 04-80 (even numbers only)		

Dual Row Breakaway Retention Pin Header

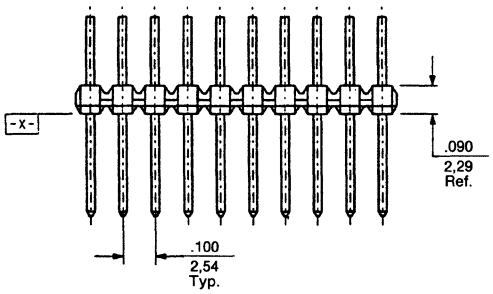
A

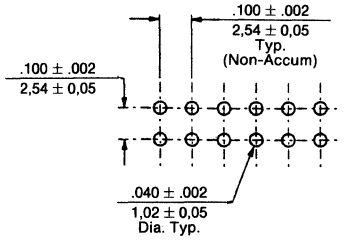
70289 Series

High Profile: .220" High Right Angle Pin Version

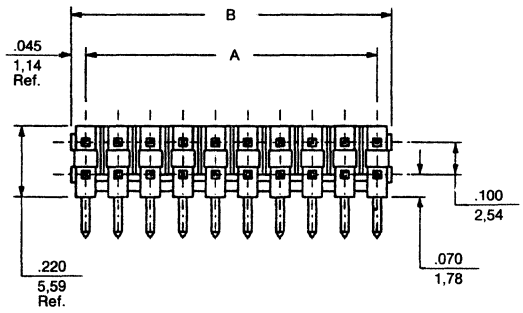


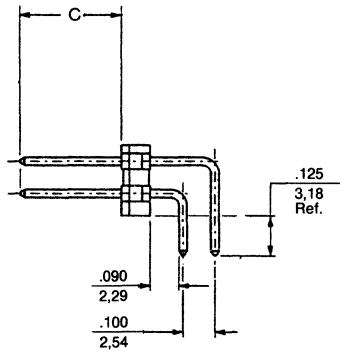
- **Kinked for PC tail for retention to the board**
- **Mates** with .100" grid female connectors:
  - PCB connectors, e.g. 70192
  - Single and dual row IDT connectors, e.g. 70400-A, 70451-A
  - Single and dual row crimp connectors, e.g. 70450-A, 70066-A
  - Ribbon cable connectors, e.g. 40312, 70121
  - Flat flexible cable connectors, e.g. 70430-A, 40556
  - Shunts, e.g. 7859, 90059
- **Stackable** end-to-end on unbroken edge
- **Circuit sizes** 4-80
- **Extremely stable on board** during wave soldering
- **Standoffs** facilitate post solder cleaning
- **Drawn .025" square wire** provides 4-sided smooth surface for quality interface





Recommended P.C. Board Hole Layout





Dimensions 70289

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
4	.100 2,54	.190 4,83	6	.200 5,08	.290 7,37
*For circuit sizes 8 through 80 add .100" or 2,54mm for each additional pin position					

Ordering Information NOTE: Dim. C = Mating End Dim. D = P.C. Tail

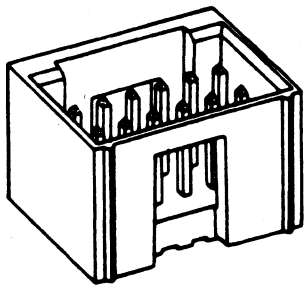
Plating Option	Mating End Dim. C - .240" (6,10) Order No.	Mating End Dim. C - .320" (8,13) Order No.
15 microinches min. select gold	•10-97-0**XX**3	•10-97-0**XX**6
30 microinches min. select gold	•10-97-0**XX**7	•10-97-0**XX**8
150 microinches tin/lead, nickel overall	•10-96-4**XX**8	•10-96-4**XX**9
Replace "**XX**" with number of circuits, 04-80 (even numbers only)		

• U.S. Standard Product, available through Molex franchised distributors.

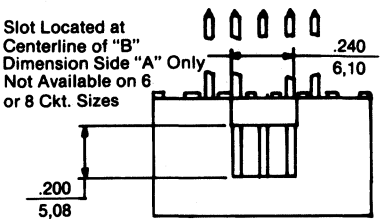
Dual Row Straight Pin Shrouded Headers

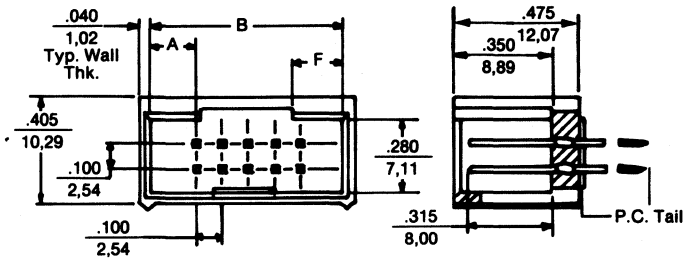
A

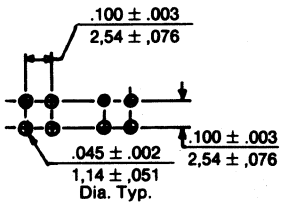
8723 Series



- **Mates** with .100" grid female connectors:
  - PCB connectors, e.g. 70192
  - Single and dual row IDT connectors, e.g. 70400-A, 70451-A
  - Dual & single row crimp connectors, e.g. 70450, 70066
  - Ribbon cable connectors, e.g. 40312
- **Polarized**
- **Latch window** retains modular connector assemblies after mating
- **Four wall shielding** provides unmated pin protection
- **Circuit sizes** 6-72
- **Drawn .025" square wire** provides 4-sided smooth surface for quality interface
- **For high temperature version** contact factory. Engineering Series 70567







Recommended P.C. Board Hole Layout

Dimensions

	MATES WITH 70181, 70450 & 70400			MATES WITH 70013, 40312		
Circuits	**Dim. A**	**Dim. B***	**Dim. F**	**Dim. A**	**Dim. B***	**Dim. F**
6	.066 1,68	.332 8,43	.090 2,29	.150 3,81	.500 12,70	.174 4,42
*Other circuit sizes: For Dim. B only, add .100" for each additional pin position						

Ordering Information (NOTE: 2 P.C. Tail Lengths Available)

	.066" (1,68mm) End Wall - Mates with Molex 70181, 70450, 70400	.150" (3,81mm) End Wall - Mates with Molex 70013, 40312
Plating Option	**.130" (3,30mm) P.C. Tail Order No.**	**.130" (3,30mm) P.C. Tail Order No.**
15 microinches gold	•15-29-60XX	•15-29-62XX
30 microinches gold	•15-41-70XX	•15-41-72XX
150 microinches tin/lead, nickel overall	•15-42-60XX	•15-42-62XX
Replace "XX" with number of circuits, 06-72 (even numbers only)		

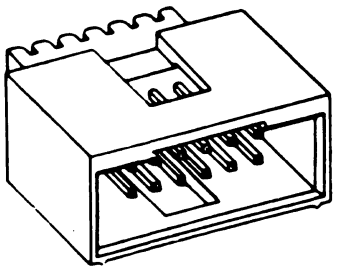
• U.S. Standard Product, available through Molex franchised distributors.

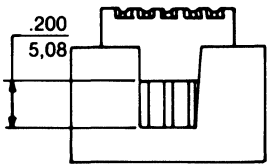
Dual Row Right Angle Shrouded Headers

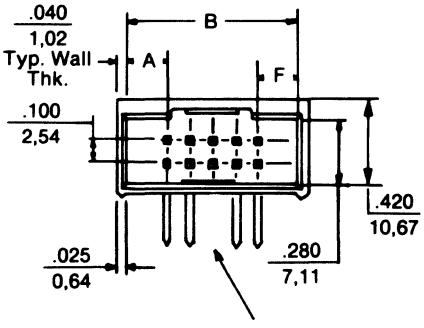
A

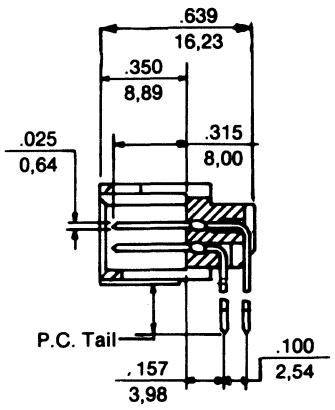
8724 Series

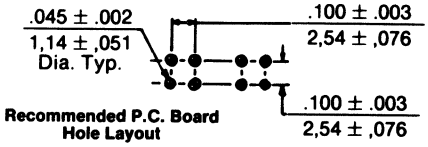
- **Mates** with .100" grid female connectors:
  - PCB connectors: e.g. 70192
  - Dual and single row IDT connectors: e.g. 70400, 70451
  - Interim clip: 70013A
  - Dual & single row crimp connectors: e.g. 70450
  - Ribbon cable connectors: e.g. 40312
- **Polarized**
- **Latch window** retains modular connector assemblies after mating
- **Four wall shielding** provides unmated pin protection
- **Circuit sizes** 6-72
- **Standoffs** minimize flux retention
- **Drawn .025" square wire** provides 4-sided smooth surface for quality interface











Dimensions

	MATES WITH 70181, 70450 & 70400			MATES WITH 70013, 40312		
Circuits	**Dim. A**	**Dim. B***	**Dim. F**	**Dim. A**	**Dim. B***	**Dim. F**
6	.066 1,68	.332 8,43	.090 2,29	.150 3,81	.500 12,70	.174 4,42
*Other circuit sizes: For Dim. B only, add .100" for each additional pin position						

Ordering Information (NOTE: 2 P.C. Tail Lengths Available)

	.066" (1,68mm) End Wall - Mates with Molex 70181, 70450, 70400	.150" (3,81mm) End Wall - Mates with Molex 70013, 40312
Plating Option	**.130" (3,30mm) P.C. Tail Order No.**	**.130" (3,30mm) P.C. Tail Order No.**
15 microinches gold	•15-29-70**XX**	•15-29-72**XX**
30 microinches gold	•15-41-80**XX**	•15-41-82**XX**
150 microinches tin/lead, nickel overall	•15-42-70**XX**	•15-42-72**XX**
Replace "**XX**" with number of circuits, 06-72 (even numbers only)		

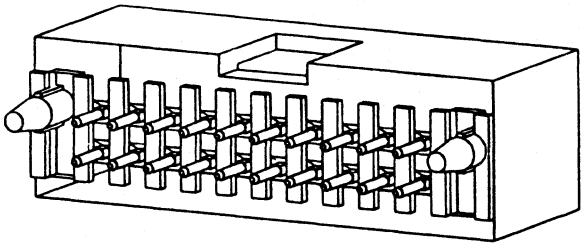
• U.S. Standard Product, available through Molex franchised distributors.

Dual Row Straight Pin Shrouded Headers

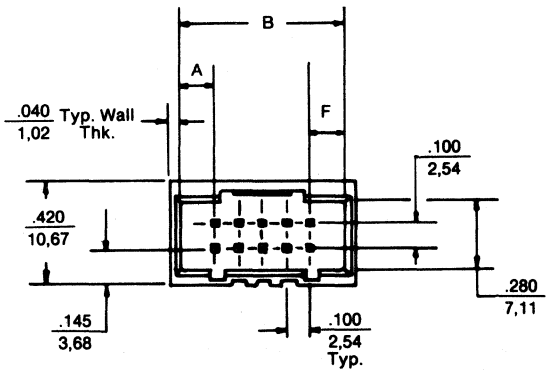
A

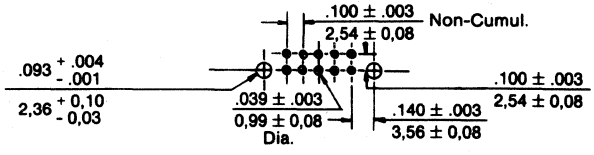
70227 Series

With P.C. Board Retention Pegs

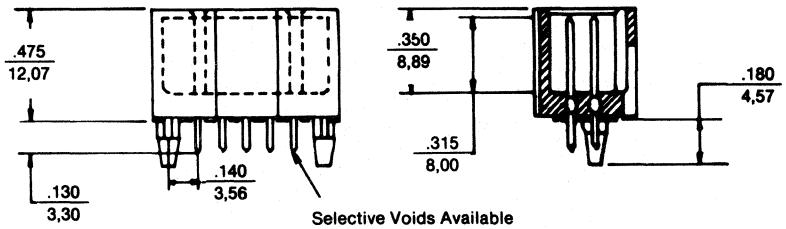


- **Mates** with .100" grid female connectors:
  - PCB connectors: e.g. 70192
  - Single and dual row IDT connectors: e.g. 70400, 70451
  - Interim clip: 70013B
  - Dual & single row crimp connectors: e.g. 70450, 70066
  - Ribbon cable connectors: e.g. 40312
- **ROBOTICALLY INSERTABLE AND COMPATIBLE**
- **Board retention pegs** hold header in place until they are permanently secured by soldering
- **Dual polarization slots** for error free mating (functional with 70013B only)
- **Latch window** retains modular connector assemblies after mating
- **Circuit sizes** 6-72
- **Standoffs** minimize flux retention
- **Round P.C. tails** allow smaller PCB homes and air robotic insertion
- **Drawn .025" square wire** provides 4-sided smooth surface for quality interface
- **For high temperature version** contact factory. Engineering Series 70568





Recommended P.C. Board Hole Pattern



Selective Voids Available

Dimensions

	MATES WITH 70013, 40312		
Circuits	Dim. A	Dim. B*	Dim. F
6	.150 3,81	.500 12,70	.174 4,42
*Other circuit sizes: For Dim. B only, add .100" for each additional pin position			

Ordering Information

NOTE: Dim. C = Mating End Dim. D = P.C. Tail

PLATING OPTION	Order No.
15 microinches min. select gold	15-47-8XX3
Overall tin	15-47-8XX4
Replace XX with number of circuits, 06-72 (even numbers only)	

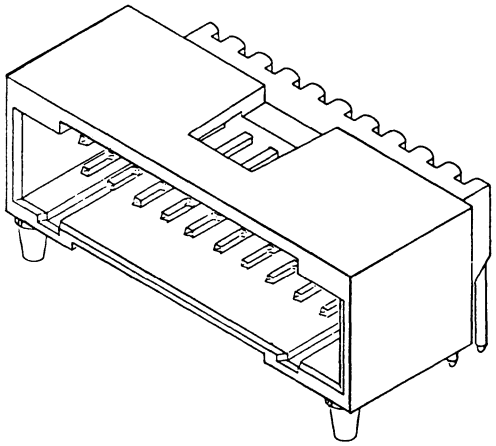
Available with polarization slots, no pegs (8723C and 8724C)

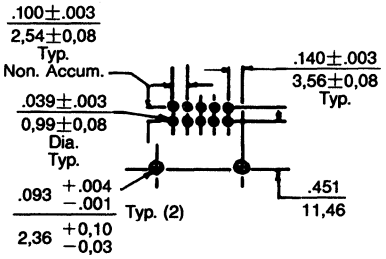
Dual Row Right Angle Shrouded Headers

A

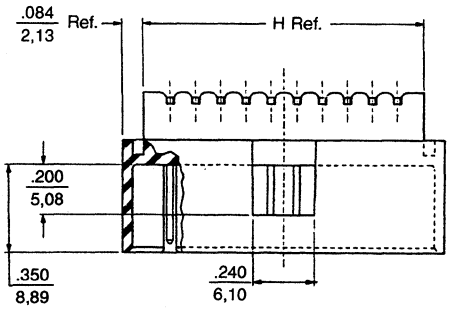
70229 Series
With P.C. Board Retention Pegs

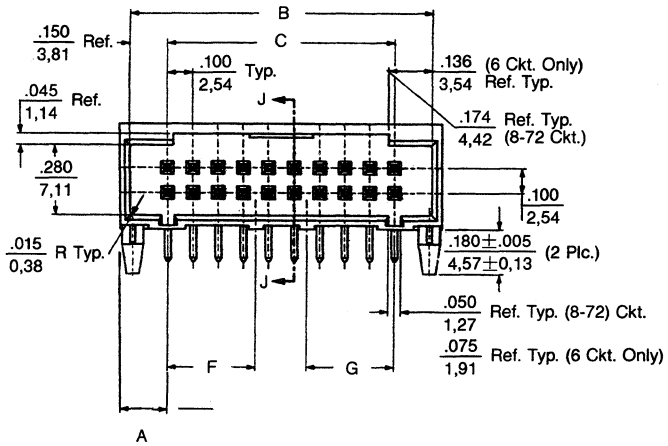
- **Mates** with .100" grid female connectors:
  - PCB connectors: e.g. 70192
  - Dual row IDT connectors: e.g. 70400, 70451
  - Interim clip: 70013B
  - Dual & single row crimp connectors: e.g. 70450, 70066
  - Ribbon cable connectors: e.g. 40312
- **ROBOTICALLY INSERTABLE AND COMPATIBLE**
- **Board retention pegs** hold header in place until they are permantently secured by soldering
- **Dual polarization slots** for error free mating (functional with 70013B only)
- **Latch window** retains modular connector assemblies after mating
- **Circuit sizes** 6-72
- **Standoffs** minimize flux retention
- **Round P.C. tails** allow smaller PCB holes and aid robotic insertion.
- **Drawn .025" square wire** provides 4-sided smooth surface for quality interface

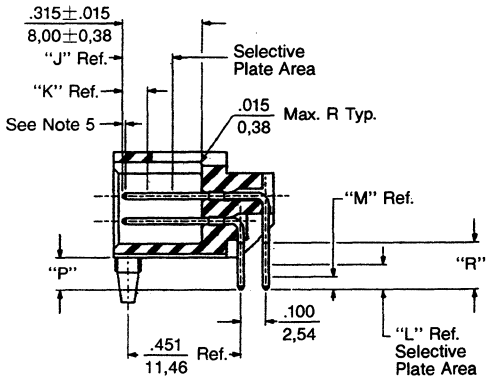




Recommended P.C. Board Hole Layout







Dimensions

	MATES WITH 70013, 40312		
Circuits	Dim. A	Dim. B*	Dim. F
6	.150 3,81	.500 12,70	.174 4,42
*Other circuit sizes: For Dim. B only, add .100" for each additional pin position			

Ordering Information

NOTE: Dim. C = Mating End Dim. D = P.C. Tail

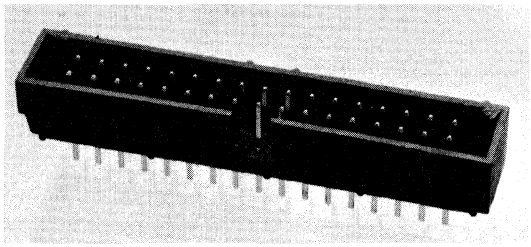
PLATING OPTION	Order No.
15 microinches min. select gold	15-47-6**XX**1
Overall tin	15-47-1**XX**1
Replace "**XX**" with number of circuits, 06-72 (even numbers only)	

Available with polarization slots, no pegs (8723C and 8724C)

Dual Row Straight Pin Low Profile Shrouded Headers

A

70246 Series



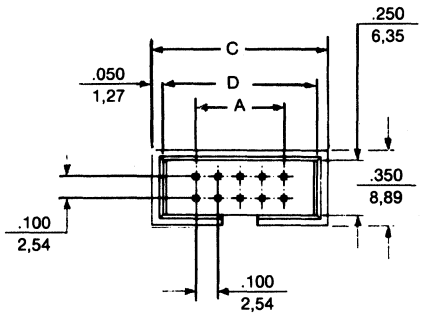
- Polarized slot
- Low profile
- Mates with .050" center ribbon cable connectors
- High temperature material version available, contact factory
- For alternate product, see 90708, page 21B, this catalog

Specifications

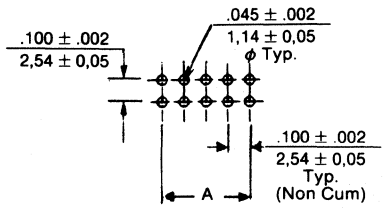
Terminal Material - Brass alloy 260

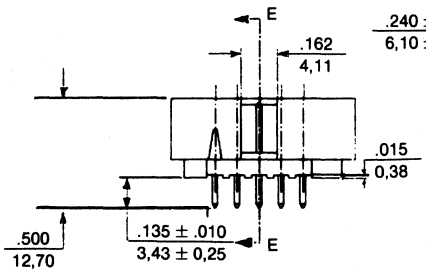
Plating - 3 gold plate thicknesses for contact area; See below for details. 0.000075 min. tin/lead in tail area. Both over 0.000050 min. nickel overall

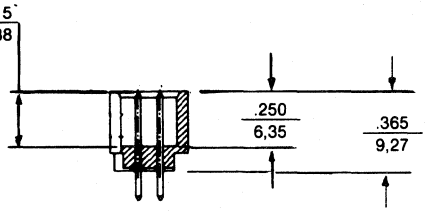
Insulator Material - glass filled polyester, 94V-0



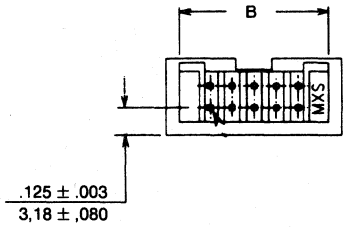
Recommended P.C. Board Hole Layout







SECTION E-E



Dimensions 70246

Ckt. Size	Dim. A	Dim. B	Dim. C	Dim. D	Ckt. Size	Dim. A	Dim. B	Dim. C	Dim. D	Ckt. Size	Dim. A	Dim. B	Dim. C	Dim. D
8	.300 7,62	.580 14,73	.700 17,78	.600 15,25	26	1.200 30,48	1.480 37,59	1.600 40,64	1.500 38,10	50	2.400 60,96	2.680 68,07	2.800 71,12	2.700 68,58
10	.400 10,16	.680 17,27	.800 20,32	.700 17,78	34	1.600 40,64	1.880 47,75	2.000 50,80	1.900 48,26	56	2.700 68,58	2.980 75,69	3.100 78,74	3.000 76,20
14	.600 15,24	.880 22,35	1.000 25,40	.900 22,86	40	1.900 48,26	2.180 55,37	2.300 58,42	2.200 55,88	60	2.900 73,66	3.180 80,77	3.300 83,82	3.200 81,28
16	.700 17,78	.980 24,89	1.100 27,94	1.000 25,40	44	2.100 53,34	2.380 60,45	2.500 63,50	2.400 60,96	64	3.100 78,74	3,380 85,85	3.500 88,90	3.400 86,36
20	.900 22,86	1.180 29,97	1.300 33,02	1.200 30,28										

Ordering Information

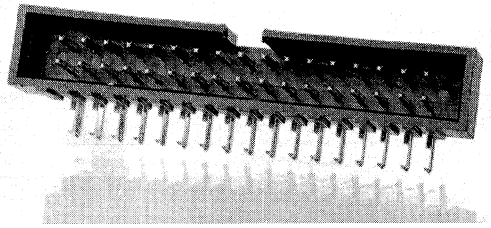
Contact Area Plating		
15 Microinches Gold Order No.	**20 Microinches Gold Order No.**	**30 Microinches Gold Order No.**
70246-XX21	70246-XX20	70246-XX22
Replace "**XX**" in order number with circuit size desired, 08, 10, 14, 16, 20, 26, 34, 40, 44, 50, 56, 60 or 64		

Dual Row Right Angle Low Profile Shrouded Headers

A

70247 Series

- Polarized slot
- Low profile
- Mates with .050" center ribbon cable connectors
- High temperature material version available, contact factory
- For alternate product, see 90709, page 22B, this catalog

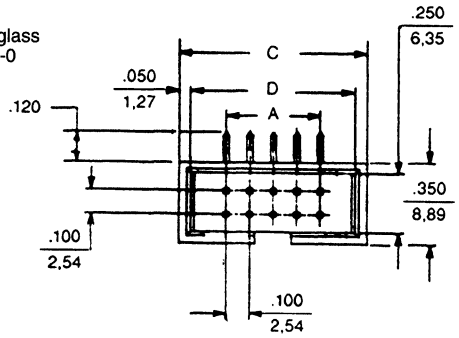


Specifications

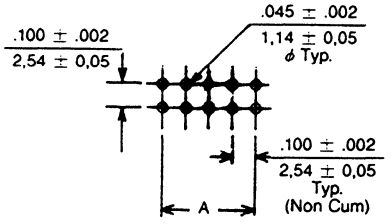
Terminal Material - Brass alloy 260

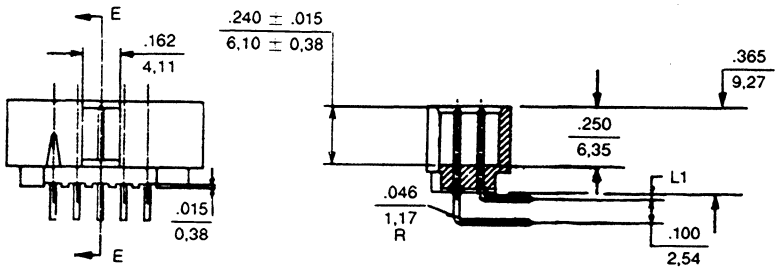
Plating - 3 gold plate thicknesses for contact area; See below for details. 0.000075 min. tin/lead in tail area. Both over 0.000050 min. nickel overall

Insulator Material - glass filled polyester, 94V-0



Recommended P.C. Board Hole Layout





Section E-E

Dimensions 70247

Ckt. Size	Dim. A	Dim. B	Dim. C	Dim. D	Ckt. Size	Dim. A	Dim. B	Dim. C	Dim. D	Ckt. Size	Dim. A	Dim. B	Dim. C	Dim. D
8	.300 7,62	.580 14,73	.700 17,78	.600 15,25	26	1.200 30,48	1.480 37,59	1.600 40,64	1.500 38,10	50	2.400 60,96	2.680 68,07	2.800 71,12	2.700 68,58
10	.400 10,16	.680 17,27	.800 20,32	.700 17,78	34	1.600 40,64	1.880 47,75	2.000 50,80	1.900 48,26	56	2.700 68,58	2.980 75,69	3.100 78,74	3.000 76,20
14	.600 15,24	.880 22,35	1.000 25,40	.900 22,86	40	1.900 48,26	2.180 55,37	2.300 58,42	2.200 55,88	60	2.900 73,66	3.180 80,77	3.300 83,82	3.200 81,28
16	.700 17,78	.980 24,89	1.100 27,94	1.000 25,40	44	2.100 53,34	2.380 60,45	2.500 63,50	2.400 60,96	64	3.100 78,74	3,380 85,85	3.500 88,90	3.400 86,36
20	.900 22,86	1.180 29,97	1.300 33,02	1.200 30,28										

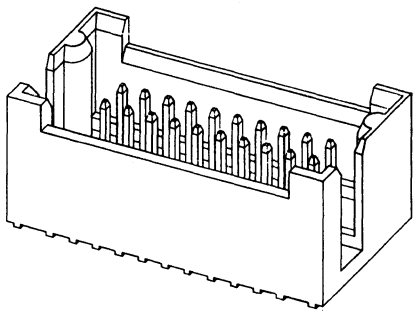
Ordering Information

	Contact Area Plating		
	15 Microinches Gold Order No.	20 Microinches Gold Order No.	30 Microinches Gold Order No.
Slotted Version	70247-**XX**01	70247-**XX**00	70247-**XX**02
Replace **"XX"** in order number with circuit size desired, 08, 10, 14, 16, 20, 26, 34, 40, 44, 50, 56, 60 or 64			

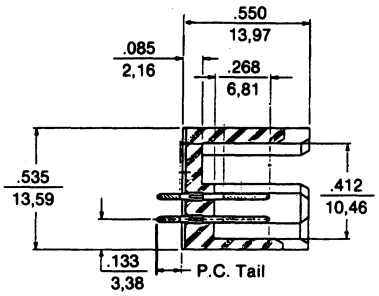
Shrouded Dual Row Header

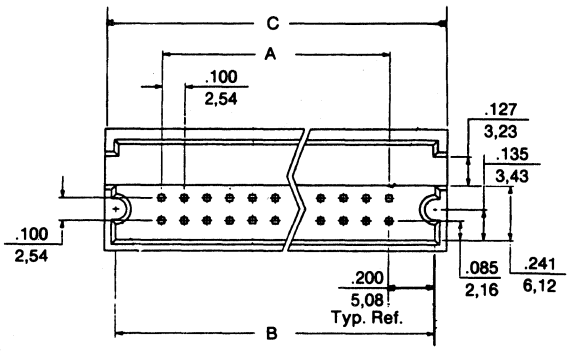
A

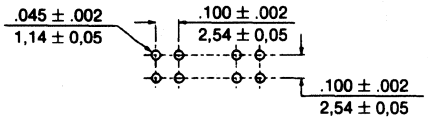
70204 Series
With P.C. Slot & Guide Ears for Blind Applications



- **Mates** with .100" grid female PCB connectors with guide ears:
  - PCB connector: 7990NA
  - Industry standard PCB connectors with similar guide ears
- **Polarization slots and guide ears** assure error free mating
- **Circuit sizes** 8-130
- **Automatable placement on PCB**
- **Drawn .025" square wire** provides 4-sided smooth surface for quality interface







Recommended P.C. Board Hole Layout

Dimensions

Circuits	Dim. A*	Dim. B*	Dim. C*
8	.300 7,62	.700 17,78	.800 20,32
*For circuit sizes 10 through 130 add .100" or 2,54mm for each additional pin position			

Ordering Information

Plating Options	Mating End - .268" (6,81mm) P.C. Tail - .110" (2,80mm) Order No.
15 microinches min. select gold	• 25-02-6**XXX**
30 microinches min. select gold	• 25-02-1**XXX**
150 microinches tin/lead, nickel overall	• 25-02-2**XXX**
Replace **"XXX"** with number of circuits, 008-130 (even numbers only)	

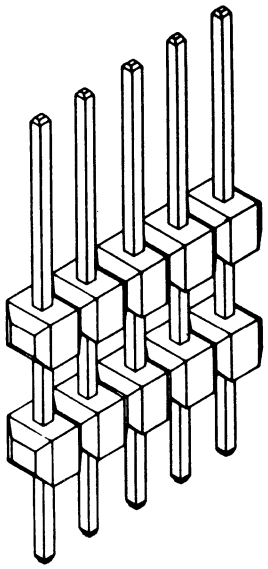
• U.S. Standard Product, available through Molex franchised distributors.

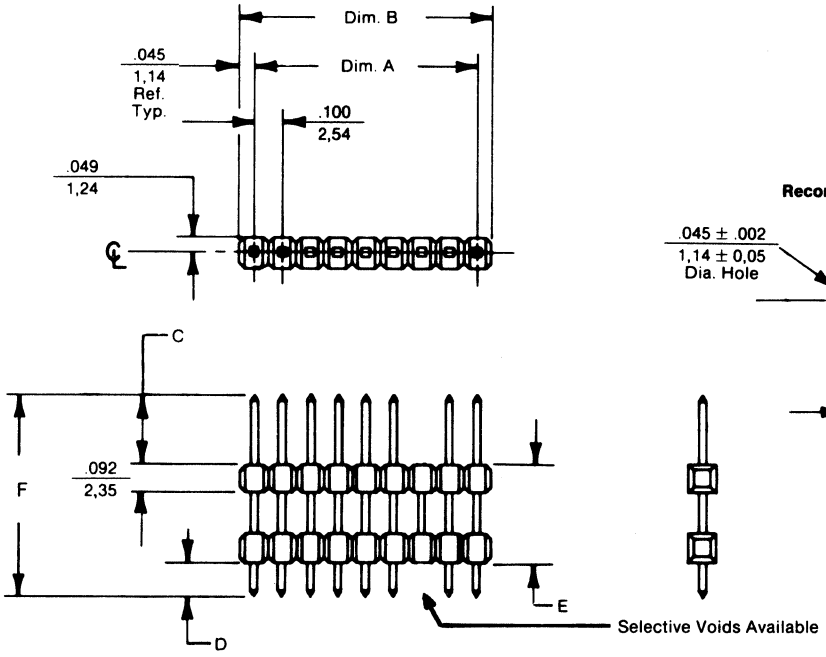
Single Row Straight Pin Breakaway Dual Body Header

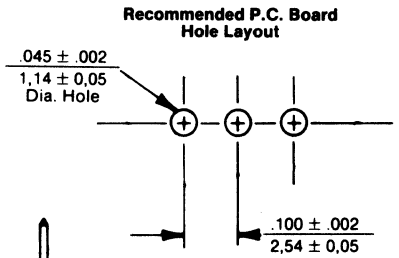
A

70345 Series

- **Mates** with .100" (2,54mm) center single row PCB connectors: e.g. 90147, 4455, single row IDT connectors: e.g. 70400-A, single row crimp connectors: e.g. 70066-A
- Maintains the dimension between two boards
- **Provides a means of electrically connecting two discrete boards** (eliminates the need for nylon or aluminum spacers)
- **Stackable** side-by-side and end-to-end (on unbroken edges)
- **Easy breakaway** to smaller sizes
- **Circuit sizes 2-40 single row**
- **Standoffs** minimize flux retention
- **Drawn .025" square wire** provides 4-sided smooth surface for quality interface







Dimensions 70345

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
2	.100 2,54	.190 4,83	3	.200 5,08	.290 7,37
*For circuit sizes 4 through 40 add .100" or 2,54mm for each additional pin position					

Dim. F (Standard Pin Lengths)				
.437 11,09	.455 11,52	.500 12,70	.515 13,08	.545 13,84
.575 14,57	.600 15,24	.625 15,87	.630 15,96	.715 18,16
.750 19,05	.800 20,32	.830 21,08	.900 22,86	.920 23,37
1.024 26,00	1.042 26,46	1.075 27,31	1.15 29,21	1.20 30,48

Ordering Information

NOTE: Dim. C = Mating End Dim. D = P.C. Tail

Contact factory to order.
Dimensions C, D and E are customer specified.

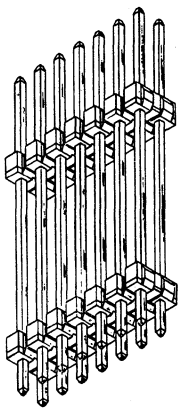
Also available in dual row version. See Eng. Series 70268

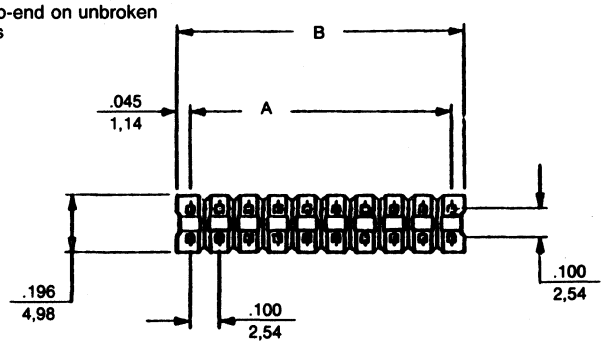
Dual Row Dual Body Breakaway Header, Straight Pin

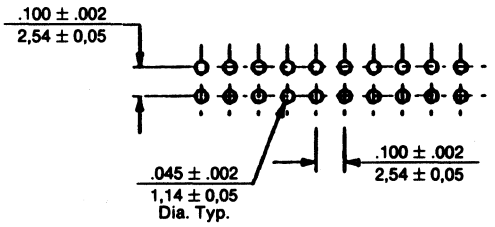
A

70268 Series

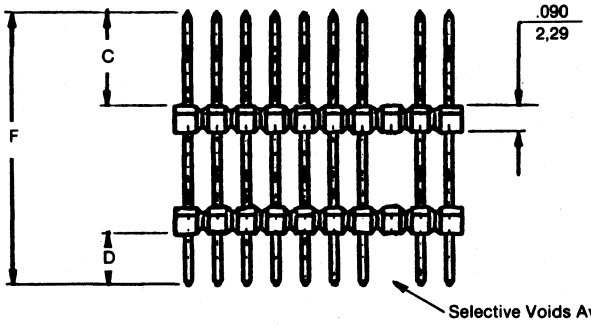
- **Mates** with .100" grid dual row PCB connectors: e.g. 70192, 7990
  - Single & dual row IDT connectors: e.g. 70400-A, 70451-A
  - Single & dual row crimp connectors: e.g. 70066-A, 70450-A
- **Maintains the dimensions between two boards**
- **Provides electrical connection** between two discrete boards and eliminates the need for nylon or aluminum spacers
- **Stackable** side-to-side and end-to-end on unbroken edges
- **Easy breakaway** to smaller sizes
- **Circuit sizes** 4-80
- **Standoffs** minimize flux retention
- **Drawn .025" square wire** provides 4-sided smooth surface for quality interface







Recommended P.C. Board Hole Layout





Dimensions

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
4	.100 2,54	.190 4,83	6	.200 5,08	.290 7,37
*For circuit sizes 8 through 80 add .100" or 2,54mm for each additional pin position					

Dim. F (Standard Pin Lengths)				
.437 11,09	.455 11,52	.500 12,70	.515 13,08	.545 13,84
.575 14,57	.600 15,24	.625 15,87	.630 15,96	.715 18,16
.750 19,05	.800 20,32	.830 21,08	.900 22,86	.920 23,37
1.024 26,00	1.042 26,46	1.075 27,31	1.15 29,21	1.20 30,48

Ordering Information

NOTE: Dim. C = Mating End Dim. D = P.C. Tail

Contact factory to order.
Dimensions C, D and E are customer specified.

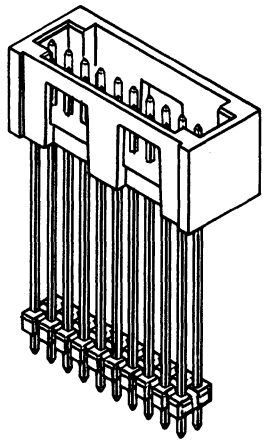
For 2-circuit, order Molex 70345

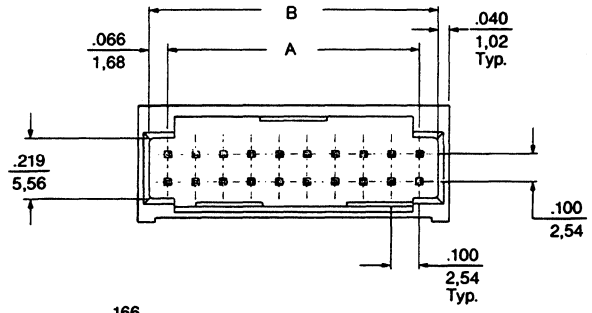
Shrouded Dual Body Header

A

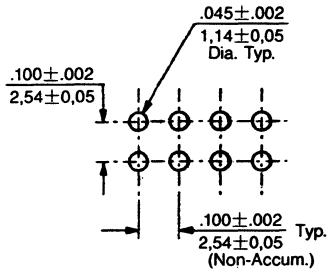
70299 Series

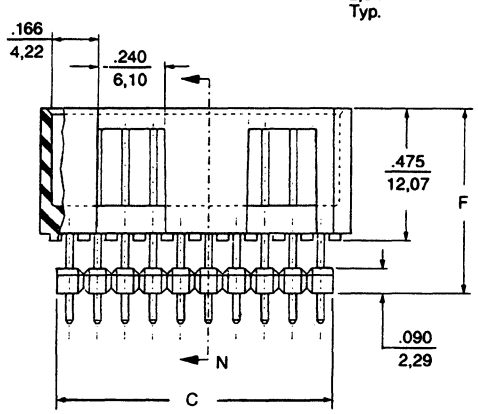
- **Mates** with .100" grid female connectors:
  - PCB connectors, e.g. 70192
  - Dual row IDT connectors, e.g. 70451
  - Dual row crimp connectors, e.g. 70450
  - Ribbon cable connectors, e.g. 40312
- **Latch window** retains modular connector assemblies after mating
- **Four wall shielding** provides unmated pin protection
- **Circuit sizes** 6-72
- **Maintains the dimension** between two boards
- **Provides a means** of electrically connecting two discrete boards, eliminating the need for nylon or aluminum spacers
- **Standoffs** minimize flux retention
- **Drawn .025" square wire** provides 4-sided smooth surface for quality interface.

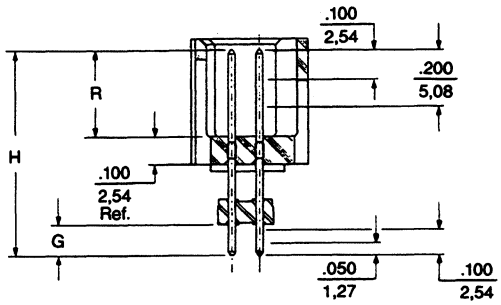




Recommended P.C. Hole Layout







Section N-N

Dimensions

Circuits	Dim. A*	Dim. B*	Dim. C*
6	.200 5,08	.332 8,43	.290 7,37
8	.300 7,62	.432 10,97	.390 9,91

*For circuit sizes 10 through 72 add .100" or 2,54mm for each additional pin position.

Dim. G Standard	Dim. H	Dim. R	Dim. F (Standard Pin Lengths)							
.110 2,79	is customer specified	.320 8,13	.640 16,25	.655 16,63	.687 17,45	.730 18,54	.842 21,38	.857 21,76	.930 23,62	1.381 35,07
		.240 6,10	.650 16,51	.715 18,16	.762 19,35	.775 19,68	1.25 31,75			

Ordering Information NOTE: Dim. R = Mating End Dim. G = P.C. Tail

Contact Factory to Order

Two Circuit Shunt or Jumper

A

7859 Series

- Mates with .100" grid male connectors:
  - Dual or single row headers: e.g. 8624 & 42375
  - .025" square wire pins: e.g. 4166
- Easily applied — no soldering
- Reliable — no accidental disconnects
- Low cost alternative to DIP switches
- Increases current flow & decreases resistance vs. DIP switches
- Dual beam terminals: 2 points of contact per pin
- Open and closed top versions
- Closed top prevents upside down mating
- Stackable end-to-end and side-to-side

Specifications

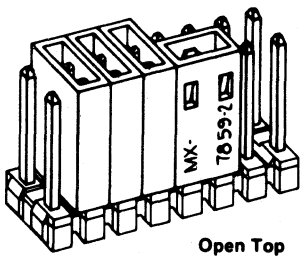
Terminal Material:
Phosphor Bronze

Plating:
.000030" or .000015" min. gold in critical area with .000050" min. nickel underplate. Or .000150" min. tin/lead with .000050" min. nickel underplate

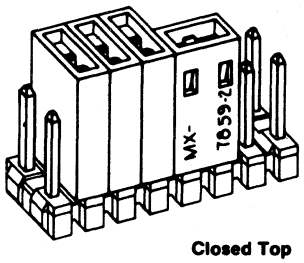
Housing:
Glass filled polyester U.L. recognized 94V-0

Contact Resistance:
15 milliohms maximum (gold)

Current Rating:
2 amps at 30°C rise over ambient

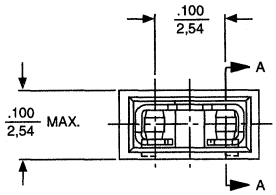


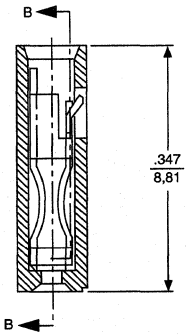
Open Top

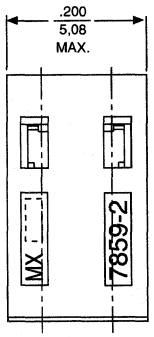


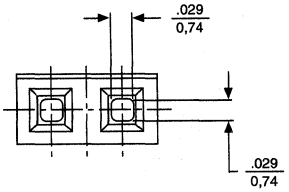
Closed Top

Open Top

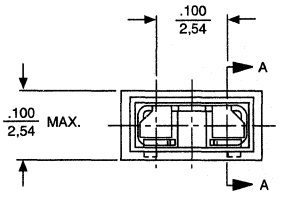


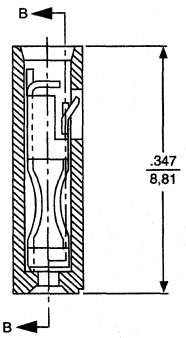






Closed Top





7859-2A
Closed Top
Same as open top except as shown

.270" (6,86mm) max. insertion on closed top version

Ordering Information

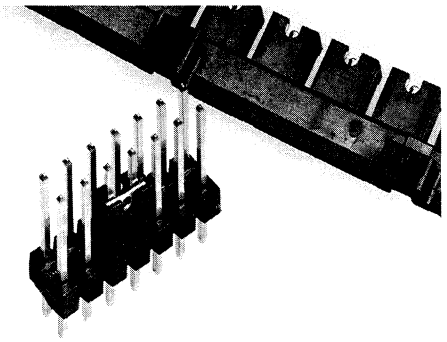
Open Top		Closed Top	
Order No.	**Plating**	**Order No.**	**Plating**
•15-29-1024	15 Microinches Gold	•15-29-1025	15 Microinches Gold
•15-29-1026	30 Microinches Gold	•15-29-1027	30 Microinches Gold
•15-38-1024	150 Microinches Tin/Lead	•15-38-1026	150 Microinches Tin/Lead

•U.S. Standard Product, available through Molex franchised distributors.

.100" 2,54mm Center Micro Shunt

A

90059 Series
Low Profile Shunt



- .195" (4,95mm) max. high
- **Mates** with .025" (0,64mm) pins, min. length .177" (4,50mm) and .100" (2,54mm) center dual and triple row headers: e.g. 90120, 90131, 5547, 5548, 8624
- Fully stackable
- **Center probe hole** - For continuity testing and easy pull off
- Color-coded housings for plating identification
- Delivered on **break-off carrier strips** for easy handling (10 per strip)
- Recommended to be applied after mating header is soldered

Specifications

Material:

Housing - Glass filled polyester 94V-0

Terminal - Phosphor bronze

Plating:

1) 15 microinches (0,38µm) gold in contact area over 30 microinches (0,76µm) nickel with gold flash overall
2) 200 microinches (5,0µm) minimum tin over 8 microinches (0,2µm) min. copper
3) Pre-tinned 35 microinches (0,9µm) min.
4) Gold 4 microinches (0,1µm) min. over 40 microinches (1,0µm) nickel min. overall
5) 30 microinches (0,76µm) gold over 50 microinches (1,27µm) nickel in contact area with 8 microinches (0,2µm) nickel overall min.

Electrical:

Current Rating - 3 amps (gold) at 30° rise over ambient; 1.5 amps (tin) at 30° rise over ambient

Test Voltage - 2000 V between adjacent terminals

Insulation Resistance - > 2 x 10^6 megohms

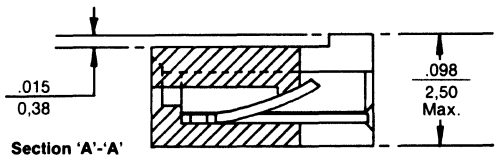
Contact Resistance - < 12 milliohms (gold); < 15 milliohms (tin)

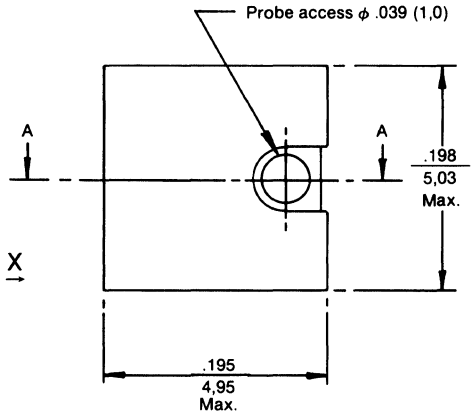
Mechanical:

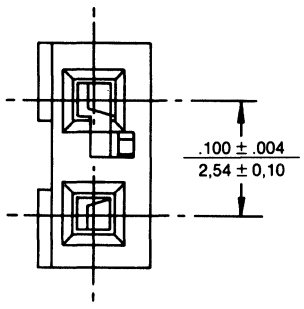
Durability - 50 cycles gold; 20 cycles tin

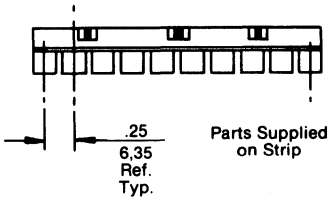
Engagement Force - 7 N max.

Disengagement Force - 0.3N (gold) min.; 0.5N (tin) min.









Ordering Information

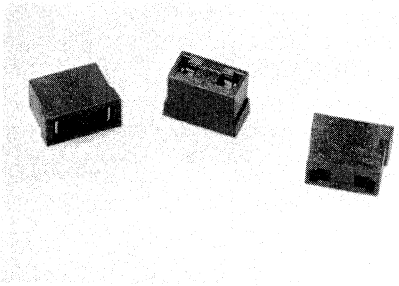
Plating No.	Order No.	Color
1	•90059-0009*	White
2	•90059-0007*	Black
3	90059-0013	Black
4	90059-0014	White
5	90059-0012	White

• U.S. Standard Product, available through Molex franchised distributors
*Preferred version in Europe/Americas

.100" 2,54mm Center Ultra Shunt

A

87092 Series
Ultra Low Profile Shunt



- .146" (3.70mm) max. high
- Fully stackable
- Mates with .025" (0.64mm) sq. pins
- Delivered on break-off metal carrier strips for easy handling
- Recommended to be applied after mating header is soldered

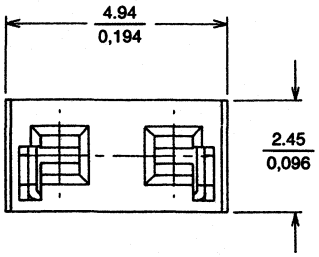
Specifications:

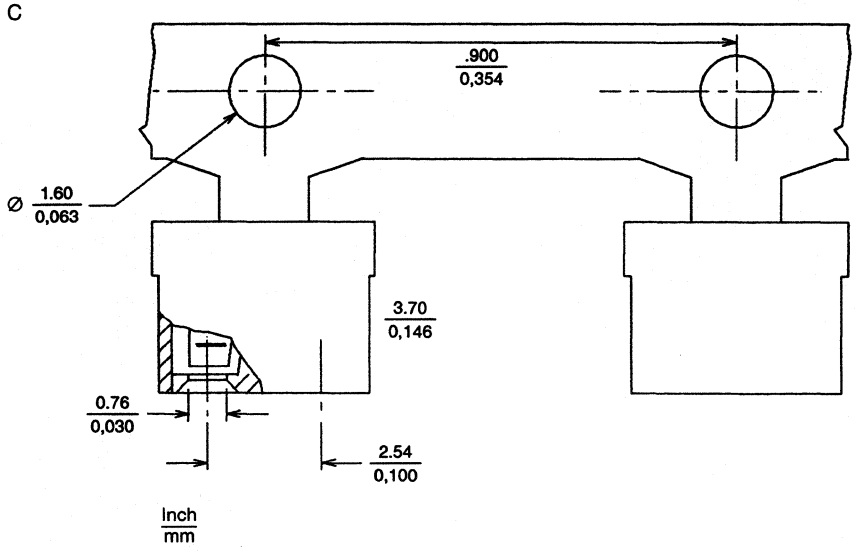
Material:
Housing – Glass-filled polyester 94V-0; color black
Terminal – Phosphor bronze

Plating:
1) 200 μin (5.0μm) min. tin over 50μin (1.27μm) min. copper overall
2) 15μin (0.38μm) min. gold in contact area over 30μin (0.76μm) min. nickel underplate
3) 30μin (0.76μm) min. gold in contact area over 30μin (0.76μm) min. nickel underplate
4) Gold Flash 1μin (0.0254) min. over 50μin (1.27μm) min. nickel underplate overall

Mechanical:
Durability – 50 cycles gold, 20 cyles tin
Engagement Force – Gold/tin – 1.1 lb./500gm max.
Disengagement Force – Gold – 0.055 lb./25gm min. Tin – 0.088 lb./40gm min.

Electrical:
Current Rating:
3.0 ampere gold
1.5 ampere tin
Operating temperature:
−55 deg C
to +125 deg C





Ordering Information

ORDER NUMBER FORMULA		
87092-30 X X		
Part Form		Plating Code
0 = On Reels		1
1 = Loose		2
		3
		4

Header for Micro Shunt .100" 2,54mm Grid

A

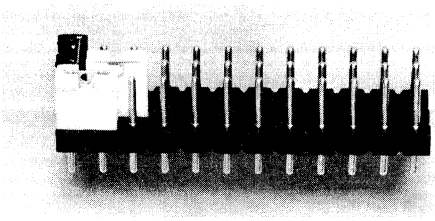
5547 Dual Row
5548 Triple Row

- **Mates** with 90059 micro shunt
- Low profile
- Mating pin length .177" (4,5mm)
- Tin or gold plated round wire pins
- Breakaway to smaller circuit sizes

Specifications

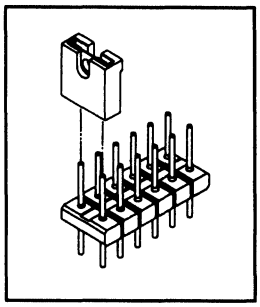
Posts -

1. 4.0 microinches min. gold over 40 microinches min. nickel
2. 120 microinches min. tin over 80 microinches min. copper

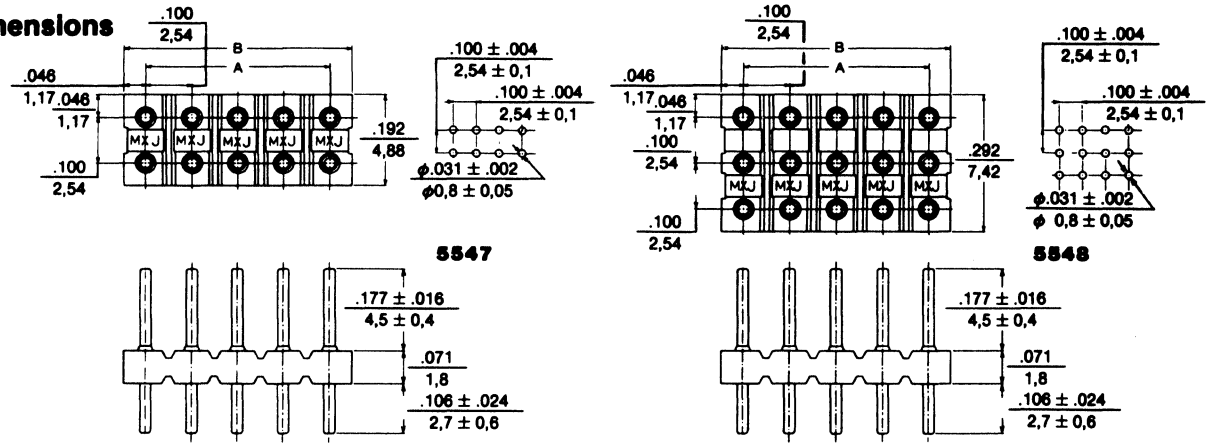


Triple Row 5548

Dual Row 5547



Dimensions



Dimensions

5547 - Dual Row												5548 - Triple Row								
Ckts.	Dim. A	Dim. B	Ckts.	Dim. A	Dim. B	Ckts.	Dim. A	Dim. B	Ckts.	Dim. A	Dim. B	Ckts.	Dim. A	Dim. B	Ckts.	Dim. A	Dim. B	Ckts.	Dim. A	Dim. B
4	.100 2,54	.192 4,88	12	.500 12,70	.592 15,04	20	.900 22,86	.982 25,20	28	1.300 33,02	1.392 35,36	9	.200 5,08	.292 7,42	21	.600 15,24	.692 17,58	30	.900 22,86	.992 25,20
6	.200 5,08	.292 7,42	14	.600 15,24	.692 17,58	22	1.000 25,40	1.092 27,74	30	1.400 35,56	1.492 37,90	12	.300 7,62	.392 9,96	24	.700 17,78	.792 20,12	33	1.000 25,40	1.092 27,74
8	.300 7,62	.392 9,96	16	.700 17,78	.792 20,12	24	1.100 27,94	1.192 30,28	32	1.500 38,10	1.592 40,44	15	.400 10,16	.492 12,50	27	.800 20,32	.892 22,66	36	1.100 27,94	1.192 30,28
10	.400 10,16	.492 12,50	18	.800 20,32	.892 22,66	26	1.200 30,48	1.292 32,82	34	1.600 40,64	1.692 42,98	18	.500 12,70	.592 15,04						

Ordering Information

5547 - Dual Row						5548 - Triple Row		
Circuits	Tin Order No.	Gold Order No.	Circuits	Tin Order No.	Gold Order No.	Circuits	Tin Order No.	Gold Order No.
4	39-27-4042	39-27-4043	20	39-27-4202	39-27-4203	9	39-27-4094	39-27-4095
6	39-27-4062	39-27-4063	22	39-27-4222	39-27-4223	12	39-27-4124	39-27-4125
8	39-27-4082	39-27-4083	24	39-27-4242	39-27-4243	15	39-27-4154	39-27-4155
10	39-27-4102	39-27-4103	26	39-27-4262	39-27-4263	18	39-27-4184	39-27-4185
12	39-27-4122	39-27-4123	28	39-27-4282	39-27-4283	21	39-27-4214	39-27-4215
14	39-27-4142	39-27-4143	30	39-27-4302	39-27-4303	24	39-27-4244	39-27-4245
16	39-27-4162	39-27-4163	32	39-27-4322	39-27-4323	27	39-27-4274	39-27-4275
18	39-27-4182	39-27-4183	34	39-27-4342	39-27-4343	30	39-27-4304	39-27-4305
						33	39-27-4334	39-27-4335
						36	39-27-4364	39-27-4365

Board Mount Receptacle Specifications

A

Single Row

Specifications

Terminal Material:
Copper alloy

Insulation Material:
Glass filled polyester, UL 94V-0, black

Plating:
.000015" min. select gold over .000050" min. nickel with .000160" min. tin/lead (60/40) on P.C. tail area.

.000030" min. select gold over .000050" min. nickel with .000060" min. tin/lead (60/40) on P.C. tail area.

.000160" min. pre-plated hot dip tin/lead (60/40).

UL Listed, CSA Certified

Specifications apply to Molex Engineering Series
90147
90148

Current Rating:
2.5 Amps (DC) at 30°C rise over ambient (3 Amps, limited circuits)

Operating Temperature:
-55°C to +125°C

Recommended Pin Length:
.222" (5,65 mm) min.; .275" (7,0 mm) max.

Dual Row

Specifications:

Mating Pin Length (Insertion Depth):
Minimum .200"; Maximum .240"

Terminal Material:
Phosphor bronze

Plating:
.000015" min. gold over .000050" min. nickel with .000075" min. tin/lead on P.C. tail area.

.000030" min. gold over .000050" min. nickel with .000075" min. tin/lead on P.C. tail area.

.000150" min. tin/lead over .000050" nickel overall

UL Listed, CSA Certified

Specifications apply to Molex Engineering Series

70181	70851	7990
70182	70852	7990-A
70191	70853	
70192	70854	

Housing:
Glass filled polyester 94V-0 UL rated

Contact Resistance:
15 milliohms max.

Temperature Range:
-40°C to +105°C

Current Rating
2.5 amperes max. full connectors @ 30°C temperature rise. (3.0 amperes limited circuits)

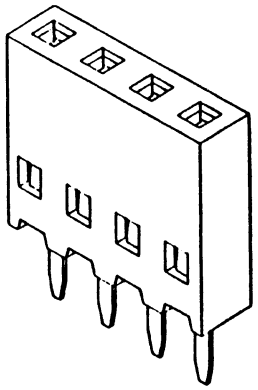
Single Row Straight Tail PCB Connector

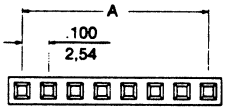
A

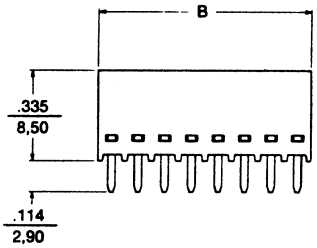
90147 Series

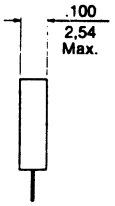
Vertical Board-to-Board Connector

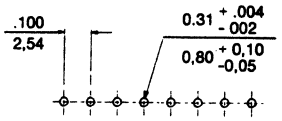
- Designed for parallel board stacking; also for PCB-to-harness and PCB-to-chassis connections
- 2 to 32 circuits
- **Mates** with .100" (2,54mm) grid male headers:
  - Single row right angle & straight headers: e.g. 42375, 42377
  - Shrouded headers: e.g. 70374, 70376
  - .025" (0,64mm) square wire pins: e.g. 4166
- **Stackable** end-to-end and side-to-side
- For .062" (1,57mm) thick P.C.B.
- **Standoffs** facilitate post solder cleaning
- **Contact orientation** to benefit consistent insertion/withdrawal forces











Recommended P.C. Board Hole Layout



Universal Polarizing Pin
Order No. 15-04-0292
Can be used with or without terminal on housing

Dimensions

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
2	.100 2,54	.200 5,08	3	.200 5,08	.300 7,62
*For circuit sizes 4 through 32 add .100" or 2,54mm for each additional pin position					

Ordering Information

PLATING OPTION	Order No.
15 microinches min. select gold	90147-12**XX**
30 microinches min. select gold	90147-13**XX**
160 microinches min. tin	90147-11**XX**
To order: Replace **XX** with number of circuits, 02-32	

Single Row Right Angle PCB Connector

A

90148 Series

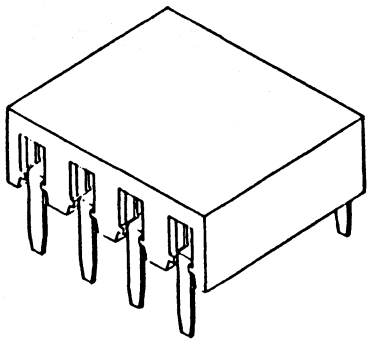
Horizontal Board-to-Board Connector

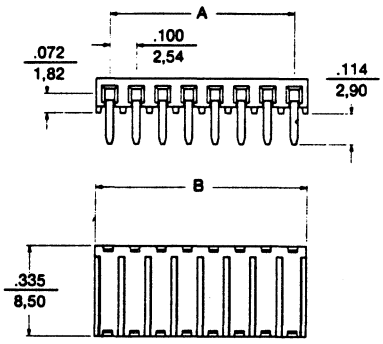
- Designed for perpendicular board stacking
- 2 to 32 circuits
- **Mates** with .100" grid male headers:

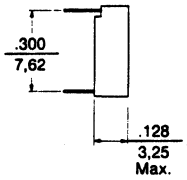
  Single row right angle & straight headers: e.g. 42375, 42377

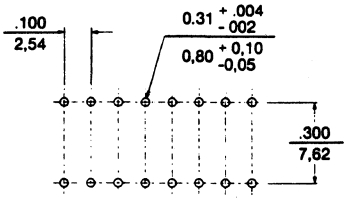
  .025" square wire pins: e.g. 4166

- **Stackable** end-to-end
- **For .062" (1,57mm) thick P.C.B.**
- **One row of P.C. tails slightly longer to aid board insertion**
- **Standoffs** facilitate post solder cleaning
- **Contact orientation** benefits consistent insertion/ withdrawal forces









Recommended P.C. Board Hole Pattern

Universal Polarizing Pin
Order No. 15-04-0292
Can be used with or without terminal in housing

Dimensions

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
2	.100 2,54	.200 5,08	3	.200 5,08	.300 7,62
*For circuit sizes 4 through 32 add .100" or 2,54mm for each additional pin position					

Ordering Information

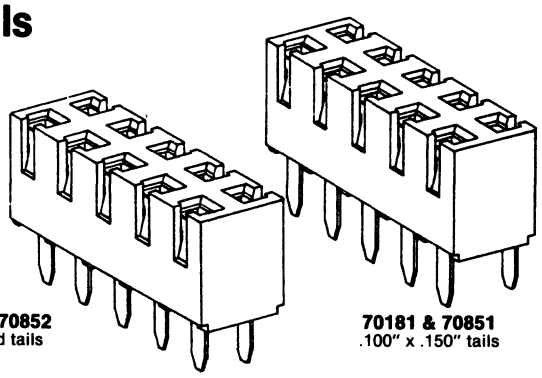
Plating Option	Order No.
15 microinches min. select gold	90148-12**XX**
30 microinches min. select gold	90148-13**XX**
150 microinches tin/lead	90148-11**XX**
Replace **XX** with number of circuits, 02-32	

Dual Row Vertical Mount PCB Connectors (Low Profile)

A

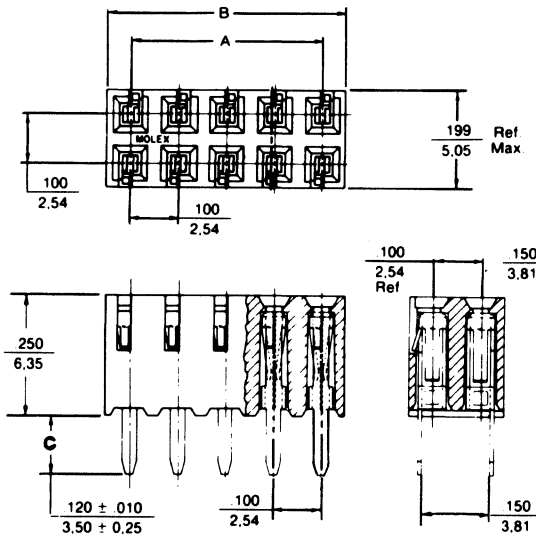
70181 & 70851 .100" x .150" P.C. Tail Grid
70182 & 70852 .100" Grid P.C. Tails
.100" Grid Mating End

- **Low profile: .250" high**
- Designed for parallel and perpendicular stacking: also for PCB-to-harness and PCB-to-chassis connections
- .120" solder tail (70181 and 70182) for .062" thick printed circuit boards
- **.050" solder tail** (70851 & 70852) ideal for thinner substrates: membrane switch and flex circuitry
- **Mates** with .100" grid male headers:
  - Dual row, right angle and straight headers: e.g. 70203 & 8624
  - Shrouded headers: e.g. 8723, 70299
  - .025" square and round wire pins: e.g. 4166
- **Stackable** end-to-end and side-to-side on .100" grid
- **Dual beam box contact**
- **Circuit sizes** 4-80
- **Standoffs** facilitate post solder cleaning



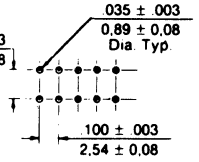
70182 & 70852
.100" grid tails

70181 & 70851
.100" x .150" tails

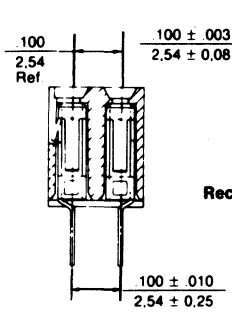


70181 and 70182

70181



Recommended P.C. Board Hole Layout



70182

Recommended P.C. Board Hole Layout



Universal Polarizing Pin
Order No. 15-04-0292
Can be used with or without terminal in housing

Dimensions

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
4	.100 2,54	.199 5,05	6	.200 5,08	.299 7,59
*For circuit sizes 8 through 80 add .100" or 2,54mm for each additional pin position					

Ordering Information

	70181	70182	70851	70852
P.C. Tail Grid	.100" x .150" (2,54 x 3,81)	.100" x .100" (2,54 x 2,54)	.100" x .150" (2,54 x 3,81)	.100" x .100" (2,54 x 2,54)
P.C. Tail Length Dim. C	.120" (3,50)	.120" (3,50)	.050" (1,27)	.050" (1,27)
PLATING OPTIONS	Order No.	Order No.	Order No.	Order No.
15 microinches min. select gold	•15-44-37**XX**	•15-44-36**XX**	15-47-60**XX**	15-47-61**XX**
30 microinches min. select gold	•15-44-40**XX**	•15-44-41**XX**	15-47-67**XX**	15-47-68**XX**
150 microinches tin/lead	•15-45-08**XX**	•15-45-09**XX**	15-45-40**XX**	15-45-41**XX**
	Replace **"XX"** with number of circuits per **row** (02-40). Example: 20 circuit = 15-44-37**10.**		Replace **"XX"** with **total** number of circuits (04-80). Example: 20 circuit = 15-47-60**20.**	

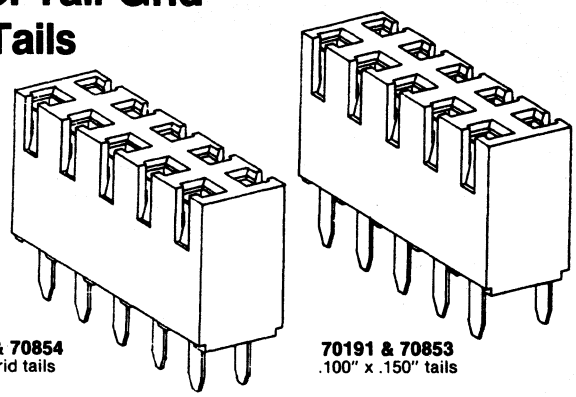
• U.S. Standard Product, available through Molex franchised distributors.

Dual Row Vertical Mount PCB Connectors (High Profile)

A

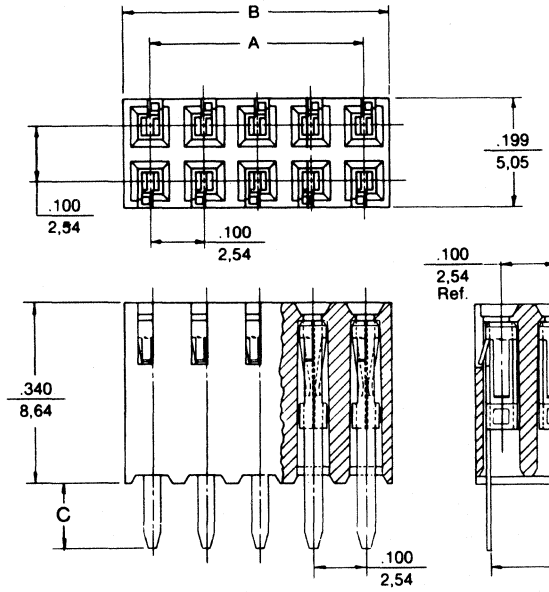
70191 & 70853 .100" x .150" P.C. Tail Grid
70192 & 70854 .100" Grid P.C. Tails
.100" Grid Mating End

- **High profile; .340" high**
- Other features same as 70181, 70182, 70851 & 70852

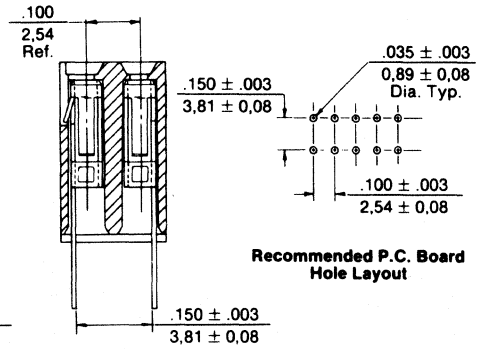


70192 & 70854
.100" grid tails

70191 & 70853
.100" x .150" tails

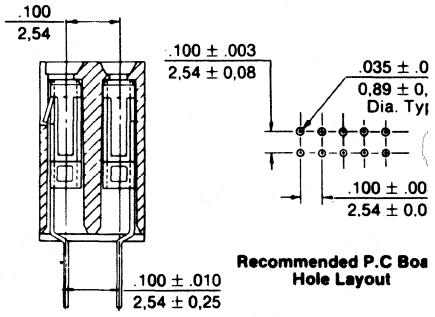


70191 & 70192



Recommended P.C. Board Hole Layout

70191



Recommended P.C Boa Hole Layout

70192



Universal Polarizing Pin
Order No. 15-04-0292
Can be used with or without terminal in housing

Dimensions

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
4	.100 2,54	.199 5,05	6	.200 5,08	.299 7,59
*For circuit sizes 8 through 80 add .100" or 2,54mm for each additional pin position					

Ordering Information

	70191	70192	70853	70854
P.C. Tail Grid	**.100" x .150" (2,54 x 3,81)**	**.100" x .100" (2,54 x 2,54)**	**.100" x .150" (2,54 x 3,81)**	**.100" x .100" (2,54 x 2,54)**
P.C. Tail Length Dim. C	**.120" (3,50)**	**.120" (3,50)**	**.050" (1,27)**	**.050" (1,27)**
PLATING OPTIONS	**Order No.**	**Order No.**	**Order No.**	**Order No.**
15 microinches min. select gold	•15-44-33**XX**	•15-44-32**XX**	15-47-65**XX**	15-47-66**XX**
30 microinches min. select gold	•15-44-44**XX**	•15-44-45**XX**	15-47-69**XX**	15-47-70**XX**
150 microinches tin/lead	•15-45-12**XX**	•15-45-13**XX**	15-45-42**XX**	15-45-43**XX**
	Replace **"XX"** with number of circuits per **row** (02-40). Example: 20 circuit = 15-44-33**10.**		Replace **"XX"** with **total** number of circuits (04-80). Example: 20 circuit = 15-47-65**20.**	

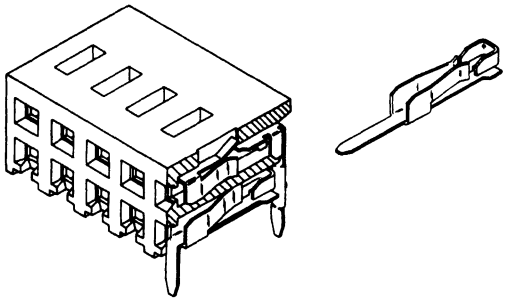
• U.S. Standard Product, available through Molex franchised distributors.

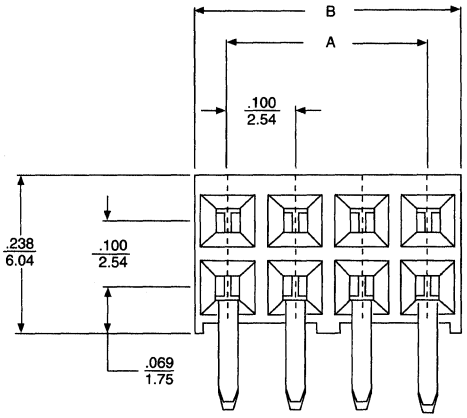
Dual Row Right Angle PCB Connector

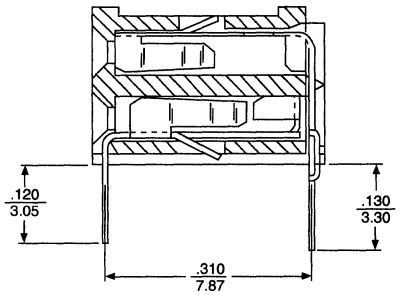
A

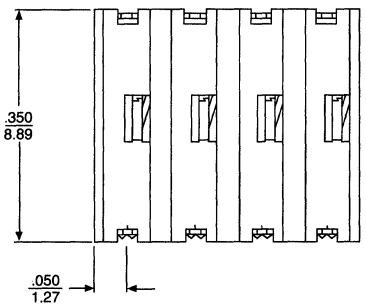
7990 Series

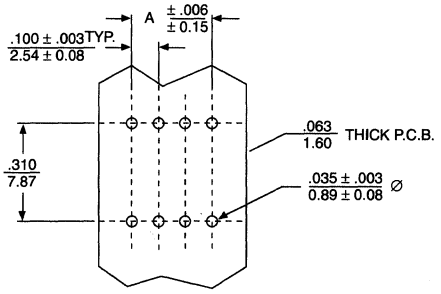
- Designed for perpendicular board stacking
- **Mates** with .100" grid male headers:
  - Dual and single row straight and right angle headers: e.g. 70216 & 8624
  - .025" square and round wire pins: e.g. 4166
- **Stackable** end-to-end
- **Dual beam box contact**
- **Staggered mating depth** to lower initial insertion force
- **Back row of P.C. tails slightly longer** to ease board loading
- **Positive pin stop** to prevent shorting between rows
- P.C. tails locked into housing
- **Circuit sizes** 8-130*











PCB LAYOUT

Universal Polarizing Pin
Order No. 15-04-0292
Can be used with or without terminal in housing

In the Far East this product has different Eng. Nos. and Order Nos. Contact factory for sales drawings on 70057-XXXX.

Dimensions 7990

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
8	.300 7,62	.399 10,13	10	.400 10,16	.499 12,67
*For circuit sizes 12 through 130 add .100" or 2,54mm for each additional pin position					

Ordering Information

PLATING OPTION	Order No.
150 microinches tin/lead	•15-38-2**XXX**
Replace "**XXX**" with number of circuits, 008-130	

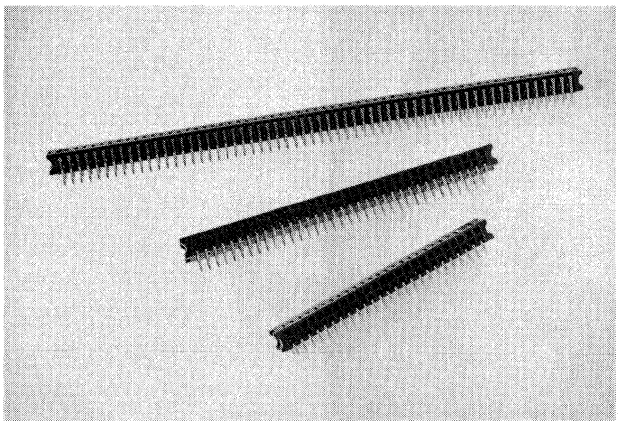
• U.S. Standard Product, available through Molex franchised distributors.

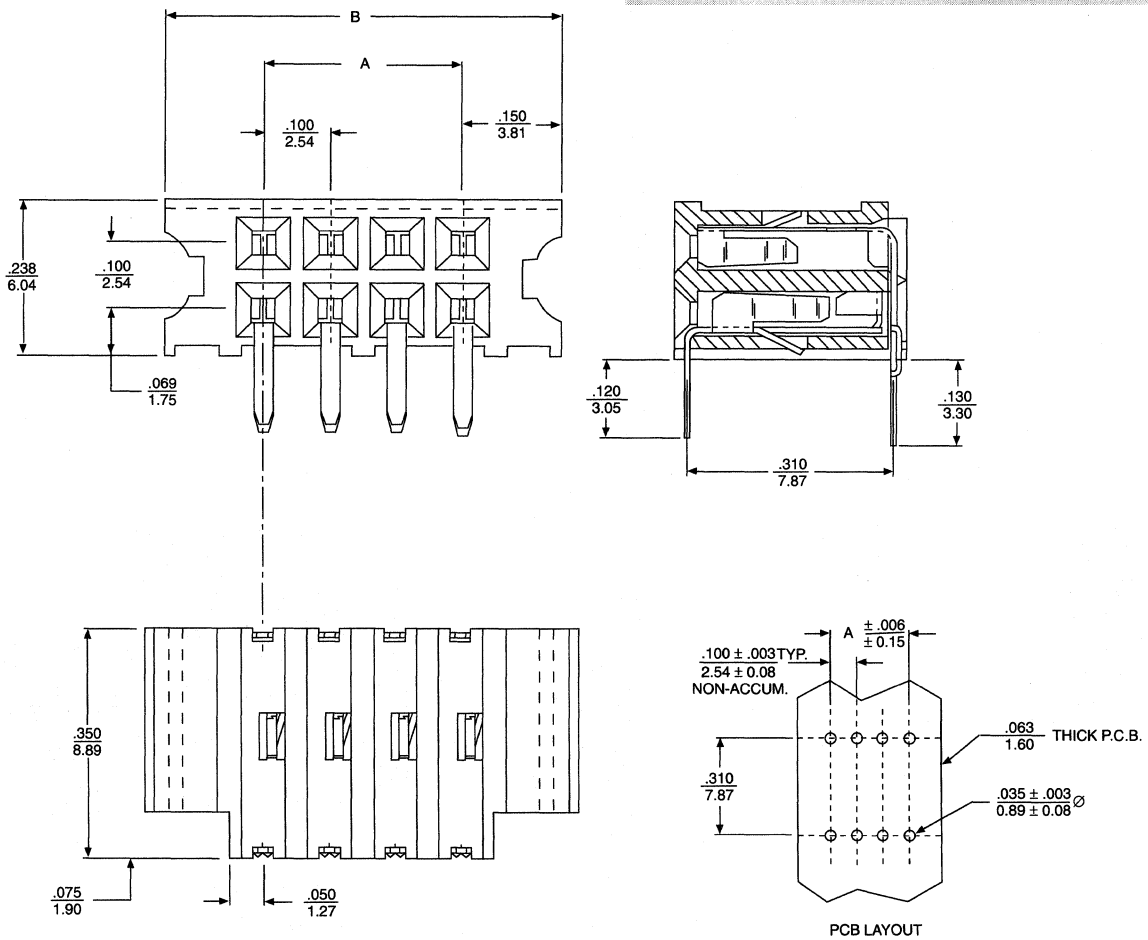
Dual Row Right Angle PCB Connector

A

7990-NA Series

- **Mates** with .100" grid male headers with guide ears:
  70204
  Industry standard shrouded headers with ribs that correspond to the polarization slots
- **Polarization slots** guide connector over mating pins
- **Staggered mating depth** of contact lowers initial mating force
- Back row of **PC tails slightly longer** to ease board loading
- **Positive pin stop** to prevent shorting between rows
- **P.C. tails** locked into housing
- **Circuit sizes** 4-130*





PCB LAYOUT

Universal Polarizing Pin
Order No. 15-04-0292
Can be used with or without terminal in housing

Dimensions 7990-NA

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
8	.300 7,62	.600 15,24	10	.400 10,16	.700 17,78
*For circuit sizes 12 through 130 add .100" or 2,54mm for each additional pin position					

Ordering Information 7990-NA

Plating Option	Order No.
150 microinches tin/lead	•15-38-3**XXX**
Replace **"XXX"** with number of circuits, 004-128	

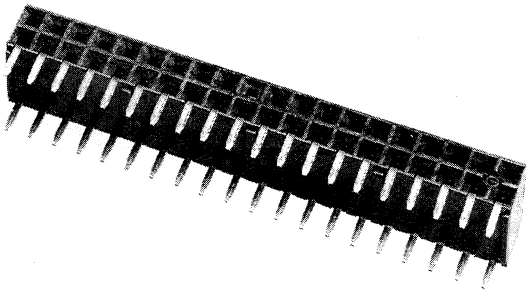
***NOTE:** For 130 circuit part see Eng. Series 70057
• U.S. Standard Product, available through Molex franchised distributors.

Dual Row Right Angle PCB Connector

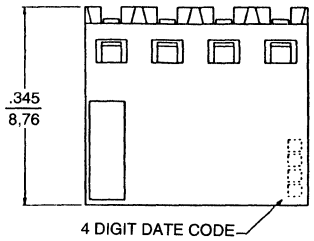
A

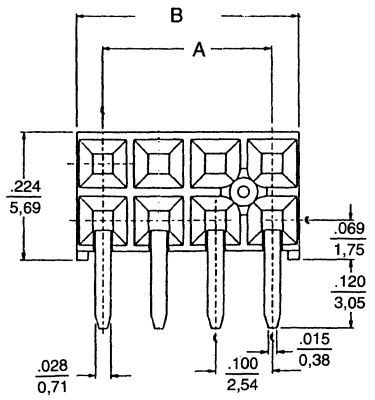
71973 Series

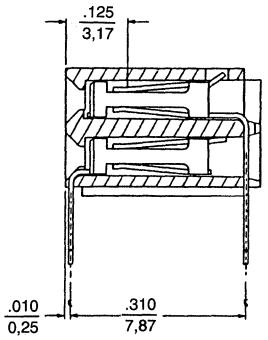
Early Entry Receptacle Flangeless, without lower row pin stop



- New early entry contact provides .040" additional gold wipe on male post
- Designed for perpendicular board stacking
- Stackable end-to-end
- Flangeless with lower row pin stop offered, contact factory
- Closed bottom insulator to prevent solder wicking
- Tube packed, date code
- Mates with .100" grid male headers, 70208 and 8624 or any .025" square post
- Circuit sizes 8-130







Dimensions

Circuits	Dim A*	Dim B*	Circuits	Dim A*	Dim B*
4	.300 7,62	.395 10,03	5	.400 10,16	.495 12,57
* For circuit sizes 8 through 130 add .100" or 2,54mm for each additional pin position					

Ordering Information

Order Number Formula

71973-0XXX

Platings
2 = 15 µ in. gold
3 = 30 µ in. gold
4 = 50 µ in. gold

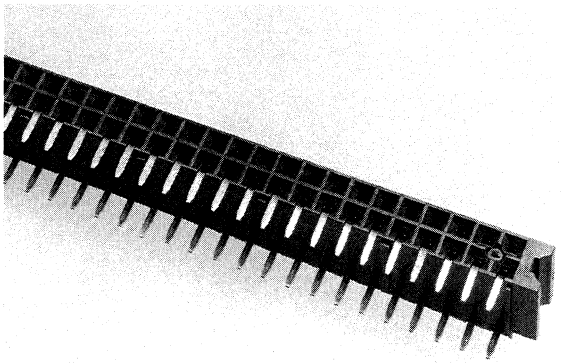
Circuit Size
(Replace **"XX"** with number of circuits per row.)
Example: 20 circuit = 71973-0210

Dual Row Right Angle PCB Connector

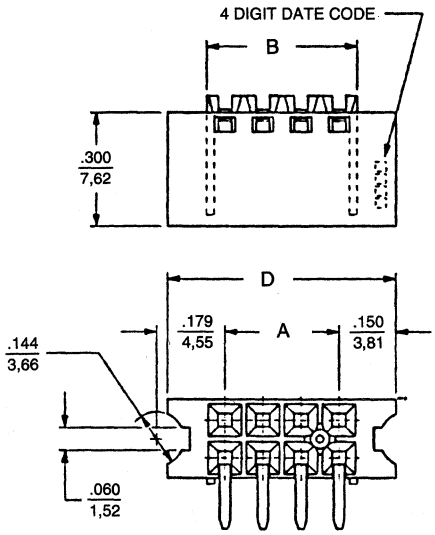
A

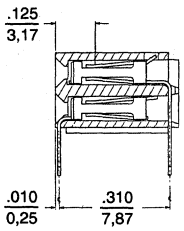
71973 Series

Early Entry Receptacle With Flange, without lower row pin stop



- New early entry contact provides .040" additional gold wipe on male post
- Designed for perpendicular board stacking
- Lower row pin stop offered, contact factory
- Closed bottom insulator to prevent solder wicking
- Tube packed, date code
- Mates with 70204
- Circuit sizes 8-130
- Flat top surface to accommodate pick & place





Dimensions

Circuits	Dim A*	Dim B*	Circuits	Dim A*	Dim B*
4	.300 7,62	.395 10,03	5	.400 10,16	.495 12,57
* For circuit sizes 8 through 130 add .100" or 2,54mm for each additional pin position					

Ordering Information

Order Number Formula

71973-1XXX

Platings
0 = 15 µ in. gold
1 = 30 µ in. gold
2 = 50 µ in. gold

Circuit Size
(Replace **"XX"** with number of circuits per row.)
Example: 20 circuit = 71973-1210

Dual Row Straight Pin Surface Mount Header

A

71308 Series

- Available with or without retention pegs
- Gull wing surface mount tails
- Vapor phase/IR reflow process compatible
- Breakaway style housing
- Stackable end-to-end (on unbroken edges)
- Drawn .025 square wire provides 4-sided smooth interface
- Mates with female connectors on .100" grid

  Single and dual row PCB connectors: e.g. 70192, 7990, 71395

  Single and dual row insulation displacement connectors: e.g. 70400-A, 70451-A

  Single and dual row crimp connectors: e.g. 70066-A, 70450-A

  Ribbon cable connectors: e.g. 40312

  Flat flexible cable connectors: e.g. 70430-A, 40556

  Shunts: e.g. 7859, 90059

Specifications

Insulator Material: Glass filled LCP, UL 94V-0 black

Terminal Material: Brass Alloy

Plating:

Plating 1) .000150" min. tin/lead over .000050" nickel

Plating 2) .000015" min. gold in selective area over .000050" min. nickel overall

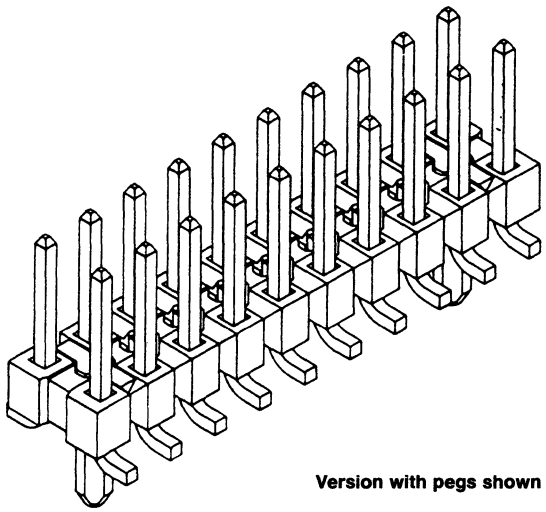
Plating 3) .000030" min. gold in selective area over .000050" min. nickel overall

Operating Temperature Range: -40°C to +105°C; +215°C intermittent (vapor phase)

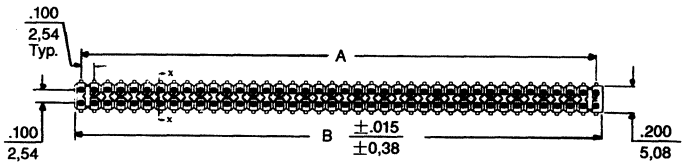
Current Rating: 2.5 amps (DC) max. full connectors at 30°C temperature rise

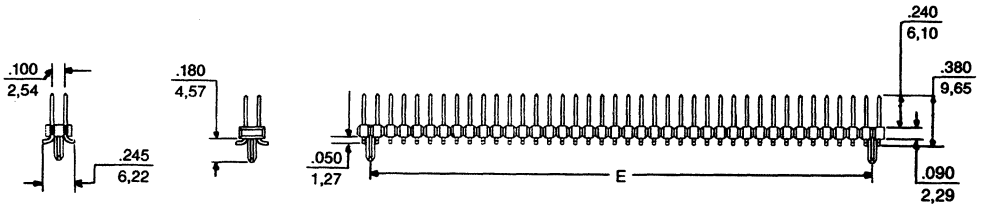
Contact Resistance: 15 milliohms max.

Screened Paste Thickness: .010" to .015"

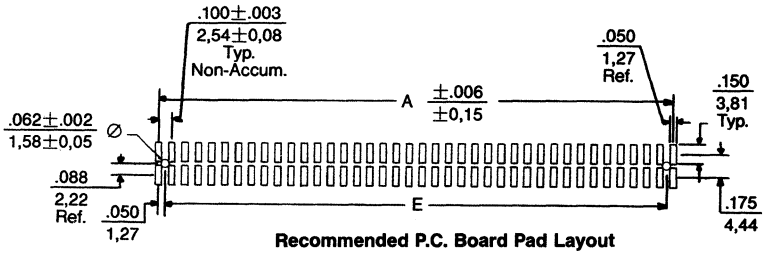


Version with pegs shown





Section X-X



Recommended P.C. Board Pad Layout

Dimensions

Circuits	Dim. A*	Dim. B*	Dim. E*	Circuits	Dim. A*	Dim. B*	Dim. E*
4	.100 2,54	.190 4,83	—	6	.200 5,08	.290 7,37	.100 2,54
*For circuits sizes 8 through 80 add .100" or 2,54 for each additional pin position							

Ordering Information — Version with PCB Retention Pegs

PLATING: 15 MICROINCHES MIN. GOLD	PLATING: 30 MICROINCHES MIN. GOLD	PLATING: 150 MICROINCHES TIN/LEAD
Order No. 15-91-1**XX**2	**Order No.** 15-91-1**XX**3	**Order No.** 15-91-1**XX**1
Replace "**XX**" with number of circuits, 22-80 (even numbers only)	Replace "**XX**" with number of circuits, 22-80 (even numbers only)	Replace "**XX**" with number of circuits, 22-80 (even numbers only)
Contact Factory to order circuit sizes 4 through 20		

Ordering Information — Version without Pegs

PLATING: 15 MICROINCHES MIN. GOLD	PLATING: 30 MICROINCHES MIN. GOLD	PLATING: 150 MICROINCHES TIN/LEAD
Order No. 15-91-0**XX**0	**Order No.** 15-91-3**XX**0	**Order No.** 15-91-2**XX**0
Replace "**XX**" with number of circuits, 04-80 (even numbers only)	Replace "**XX**" with number of circuits, 04-80 (even numbers only)	Replace "**XX**" with number of circuits, 04-80 (even numbers only)

Dual Row Vertical Surface Mount PCB Connectors

A

71395 Series

- Available with or without retention pegs
- Gull wing surface mount tails
- Vapor phase/IR reflow process compatible
- High profile: .340" high
- Designed for parallel and perpendicular board stacking; also for PCB-to-harness and PCB-to-chassis connections
- Mates with .100 grid male headers:

  Dual row right angle and straight headers: e.g. 70203, 8624 & 71308

  Shrouded headers: e.g. 8723. 70299

  .025" square and round wire pins: e.g. 4166
- Stackable end-to-end on .100" grid
- Dual beam box contact

Specifications

Insulator Material: Glass filled LCP, UL 94V-0 black

Terminal Material: Phosphor bronze

Plating:

Plating 1) .000200" min. electro-tin over .000100" min. copper

Plating 2) .000015" min. gold in selective area over .000050" min. nickel overall

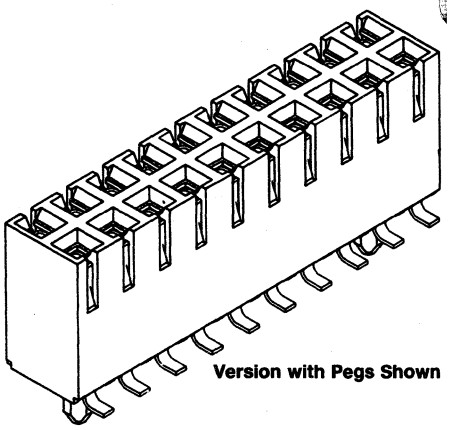
Plating 3) .000030" min. gold in selective area over .000050" min. nickel overall

Operating Temperature Range: -40°C to +105°C; +215°C intermittent (vapor phase)

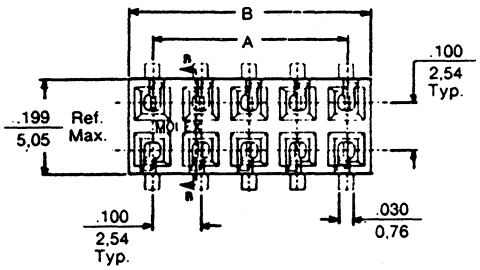
Current Rating: 2.5 amps (DC) max. full connectors at 30°C rise

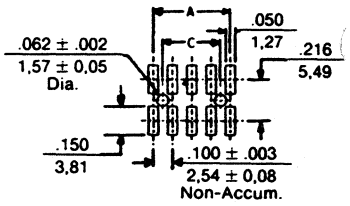
Contact Resistance: 15 milliohms max.

Screened Paste Thickness: .010" to .015"

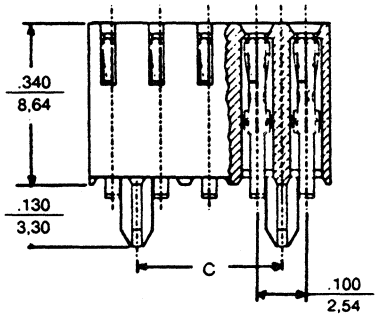


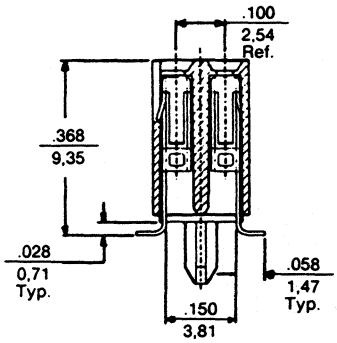
Version with Pegs Shown





Recommended P.C. Board Layout





Section B-B

Dimensions

Circuits	Dim. A*	Dim. B*	Dim. C*	Circuits	Dim. A*	Dim. B*	Dim. C*
8	.300 7,62	.399 10,13	.200 5,08	10	.400 10,16	.499 12,67	.300 7,62
*For circuits sizes 12 through 80 add .100" or 2,54 for each additional pin position							

Ordering Information – Version with PCB Retention Pegs

PLATING: 15 MICROINCHES MIN. GOLD	PLATING: 30 MICROINCHES MIN. GOLD	PLATING: 150 MICROINCHES TIN/LEAD
Order No. 15-45-35**XX**	**Order No.** 15-45-36**XX**	**Order No.** 15-45-34**XX**
Replace "**XX**" with number of circuits, 08-80 (even numbers only)	Replace "**XX**" with number of circuits, 08-80 (even numbers only)	Replace "**XX**" with number of circuits, 08-80 (even numbers only)

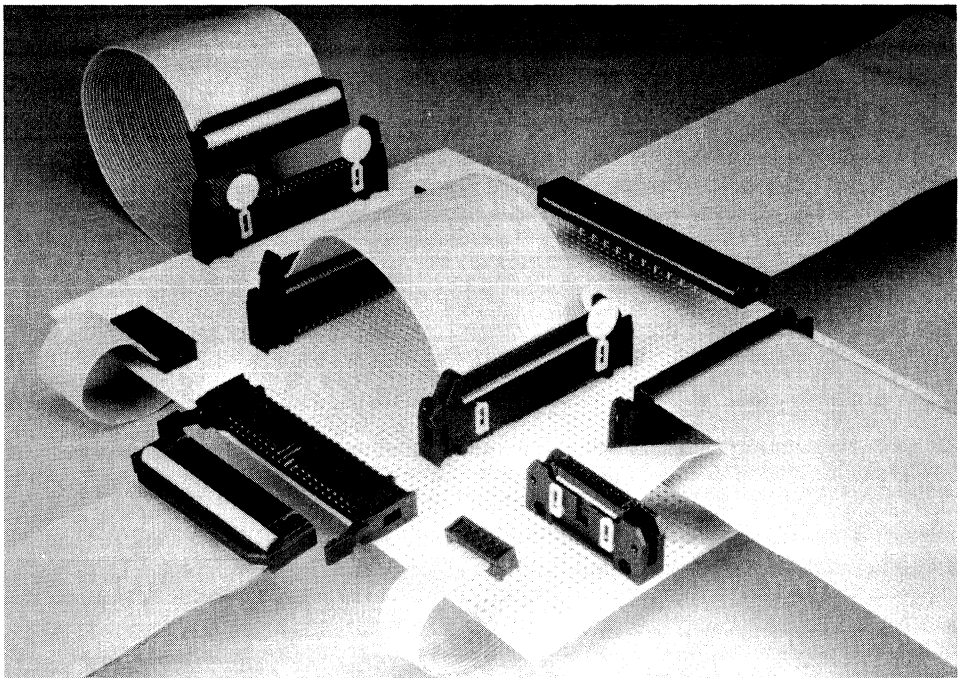
Ordering Information – Version without Pegs

PLATING: 15 MICROINCHES MIN. GOLD	PLATING: 30 MICROINCHES MIN. GOLD	PLATING: 150 MICROINCHES TIN/LEAD
Order No. 15-45-31**XX**	**Order No.** 15-45-33**XX**	**Order No.** 15-45-32**XX**
Replace "**XX**" with number of circuits, 08-80 (even numbers only)	Replace "**XX**" with number of circuits, 08-80 (even numbers only)	Replace "**XX**" with number of circuits, 08-80 (even numbers only)

.050" (1,27 mm) Center Ribbon Cable Connectors

Contents

B



MX 50 (MIL-SPEC) System

Designed specifically to meet MIL-SPEC polarization standards. Low-cost single beam terminals; duplex plated.

Introduction, Connector & Header 2B-3B
Connectors 4B-7B
Headers 8B-11B

QF 50 Qik-Flecs System

International design. Available in three styles: Standard Dual Beam Contact with four pierce points, Single Beam Contact, and MIL/DIN styles. Tin or selective gold plating.

Qik-Flecs Insulation Displacement Connector System
Introduction 14B-15B
Ribbon Cable Connectors, Single Polarization 16B
Strain Relief 17B
Female Housing Assemblies 18B-20B
Printed Circuit Board Headers 21B-34B
Transition Type Connector .100" x .100" (2,54mm x 2,54mm) 35B

PF 50 Picoflex System

Wire-to-board IDT interconnect system. Offers substantial space savings and can be used in single ended, double ended, or daisy chain applications. Tin or selective gold plating.

Picoflex (PF 50) IDT Connector and Standard Header 36B
Picoflex (PF 50) Board-In Header 37B

MX 50 Ribbon Cable Connector System

B

Introduction

The Molex family of .050" ribbon cable insulation displacement connectors, mating connectors, accessories, and application equipment is used worldwide in all types of applications from large computers and PBX's to peripherals and process monitoring systems. Molex connectors combined with options in packaging and application equipment team up to provide the lowest applied cost possible. But we haven't stopped innovating! If you don't see what you need in these catalog pages, call us. We may already have a new product to do just what you need. If not, we will be glad to discuss tooling up your request.

And let's not forget Molex product quality. SPC is used in all phases of production to provide our customers with product quality second to none.

Specifications
For Receptacles (40312/70121 Series) and Headers (40501 Series)

Housing:
94V-0 glass filled polyester; black color

Terminal:
Beryllium copper alloy

Receptacle:
Phosphor bronze

Header:
Phosphor bronze

Plating Options:
1. 15 microinches (0,38 microns) min, gold in contact area, 75 microinches (1,91 microns) min. tin/lead in termination area, both over 50 microinches (1,27 microns) min. nickel underplate
2. 30 microinches (0,76 microns) min. gold in contact area, 75 microinches (1,91 microns) min. tin/lead in termination area, both over 50 microinches (1,27 microns) min. nickel underplate
3. 150 microinches (3,81 microns) tin/lead over 50 microinches (1,27 microns) nickel underplate.

Cable Retention:
Per Mil Std 83503: Axial force of 25 lbs. min. per inch of cable width

Wire:
For use with 26 and 28 AWG stranded wire .045" (1,14mm) max. insulation dia. ribbon cable. Molex ribbon cable series 6800, 8863, and 40158.

Contact Resistance:
30 milliohms max.

Current Rating:
1 amp max. at 30°C rise

Dielectric Strength:
1000 V rms for 60 seconds min.

Insulation Resistance:
>5,000 megohms

Durability:
500 cycles

Insertion Force:
8 oz. per circuit max.

Withdrawal Force:
1.5 oz. per circuit min.

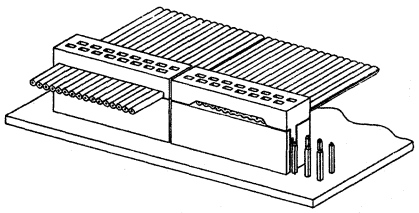
Mating Pin Length:
.220" (5,58) min.
.310" (7,87) max.

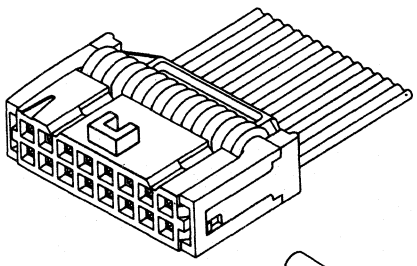
Header Pin Retention:
7 lbs. (3,18 kg) min.

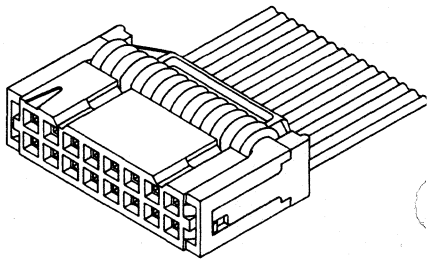
Operating Temperature:
-55°C to 125°C

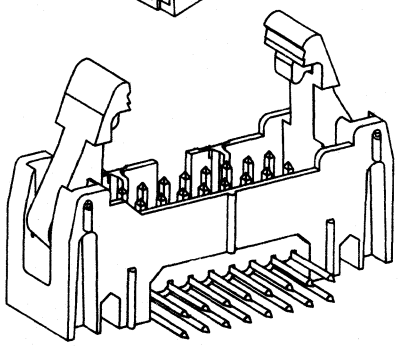
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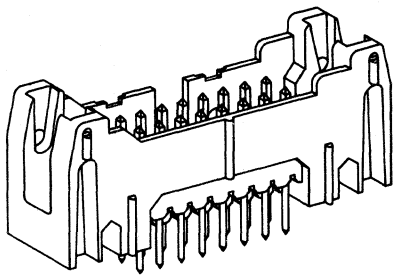
CSA Certified File # LR19980









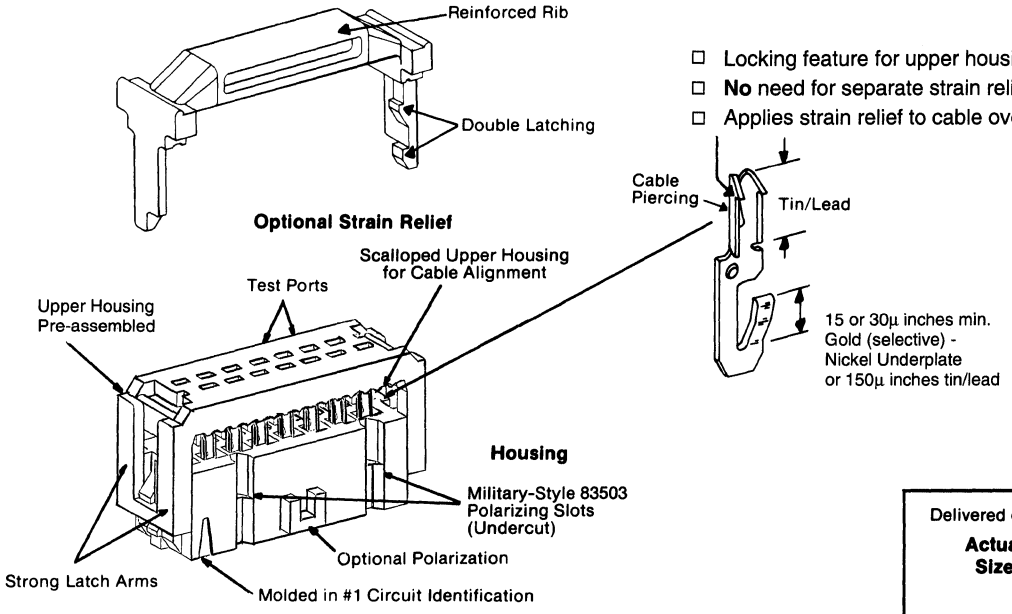


Application Tooling - See Section M, this catalog, for Ribbon Cable Terminator Handgun, Arbor Press and Semi-Automatic Terminator and full automatic cable maker.

Standard MX 50 Interconnection System

B

MX 50 Connector Features



- ☐ Locking feature for upper housing
- ☐ **No** need for separate strain relief
- ☐ Applies strain relief to cable over entire cable width

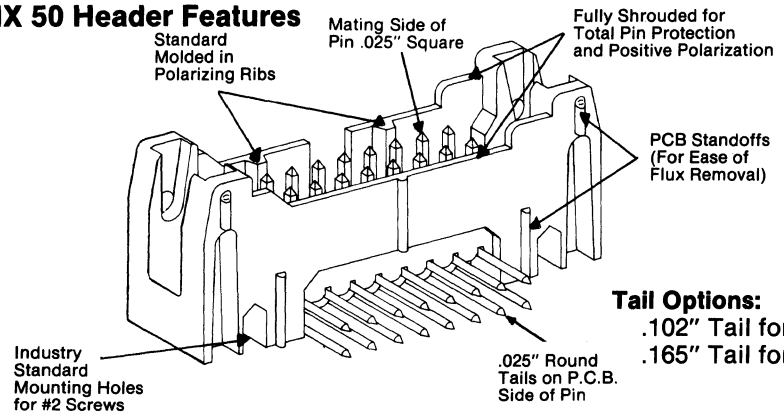
Delivered on a carrier with 20 pieces per strip.

Actual Size

Universal Polarizing Pin 40713-1

Order No. 15-04-0292

MX 50 Header Features



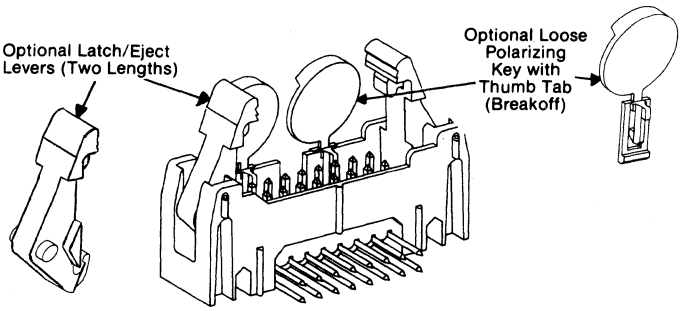
Tail Options:

.102" Tail for .062" Thick PCB

.165" Tail for .093"/.125" Thick PCB

MX-50 Header Options - Molded-in Insertable Military Style Polarizing Key

- Insertable Latches (Long or Short)

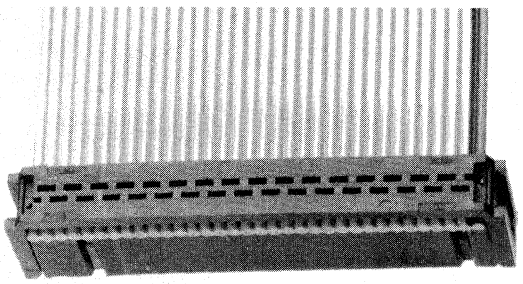


MX 50 Ribbon Cable Connector System

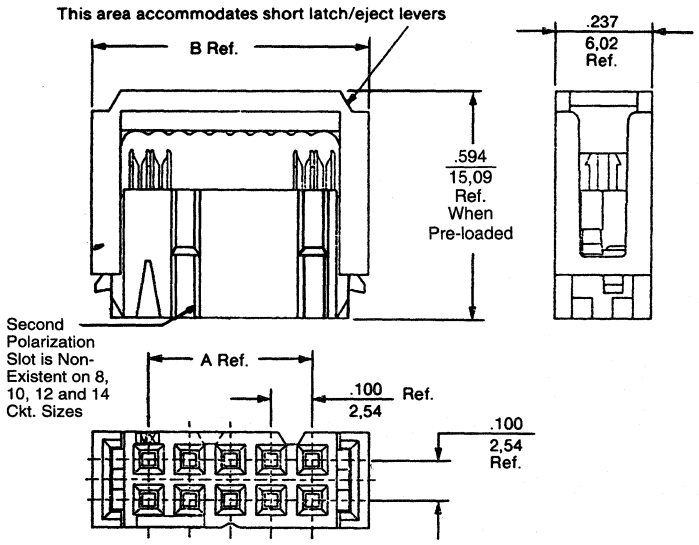
B

40312 Series Connector
IDT Terminal .050" (1,27 mm) Centers for Dual Row .100" (2,54 mm) Grid

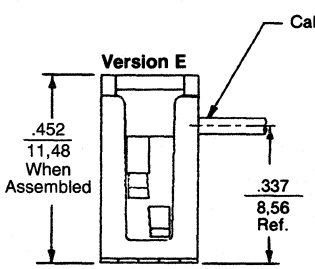
- **Designed to mate with industry standard headers utilizing short latch/eject levers**
- Shipped with upper housing preloaded in convenient plastic tubes for ease of termination and handling
- Accepts AWG 26 or 28 stranded tinned and 28 AWG topcoated wire
- Chamfered pin lead ins
- Various packaging options for ease of termination and handling. Packaging also available for Molex AM63200, Shields® 921 and Shields 805
- Duplex plated
- Optional strain relief
- Terminates .050" (1,27mm) center ribbon cable
- Optional center polarization; see version F next page
- **Locking IDT section for upper housing**
- Mates with .025" square or round pin, mating length .220" to .310"



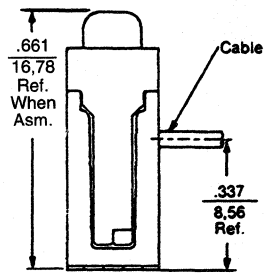
Version E shown terminated to ribbon cable.
MIL-C-83503 Type Polarization



MIL-C-83503-Type Polarization VERSION E Shown (VERSION G is the same as E except strain relief is included)



Version G with strain relief



Dimensions

Circuits	Dim A	Dim B	Circuits	Dim A	Dim B	Circuits	Dim A	Dim B	Circuits	Dim A	Dim B
8	.300 7,62	.573 14,55	20	.900 22,86	1.173 29,79	30	1.400 35,56	1.673 42,49	44	2.100 53,34	2.373 60,27
10	.400 10,16	.673 17,09	24	1.100 27,94	1.378 34,87	34	1.600 40,64	1.873 47,57	50	2.400 60,96	2.673 67,89
12	.500 12,70	.773 19,63	26	1.200 30,48	1.473 37,41	36	1.700 43,18	1.973 50,11	60	2.900 73,66	3.173 80,59
14	.600 15,24	.873 22,17	28	1.300 33,02	1.573 39,95	40	1.900 48,26	2.173 55,19	64	3.100 78,74	3.373 85,67
16	.700 17,78	.973 24,74									

Ordering Information - Tube Packaged for AM60556

Plating Options	MIL-C-83503 Polarization	
	VERSION E Connector w/o Strain Relief	VERSION G Same as "E" But With Strain Relief
15 Microinches Min. Selective Gold	• 15-29-77**XX**	• 15-29-93**XX**
30 Microinches Min. Selective Gold	• 15-29-78**XX**	• 15-29-95**XX**
150 Microinches Min. Overall Tin/Lead	• 15-38-8**XX**5	• 15-29-96**XX**

Contact factory for part numbers packaged for automatic termination (AM 63200/Osprey)

Replace **"XX"** with number of circuits desired (8, 10, 12, 14, 16, 20, 24, 26, 28, 30, 34, 36, 40, 44, 50, 60, 64). Other circuits sizes available. Contact factory.
• U.S. Standard Product, available through Molex franchised distributors.
Optional Loose Strain Relief: Consult Factory
Optional Polarizing Insert - 20 Pieces per Strip: 15-04-0292

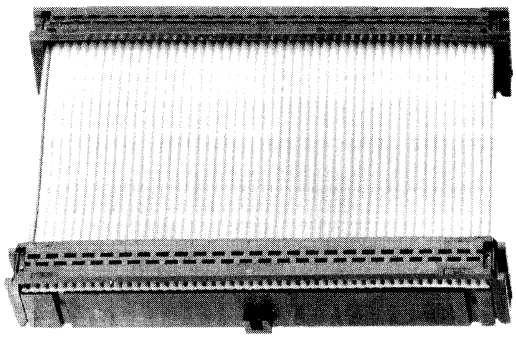
Recommended Molex Ribbon Cable for use with 40312 Series: Eng. Nos. 6800, 8863, 40158.

MX 50 Ribbon Cable Connector System

B

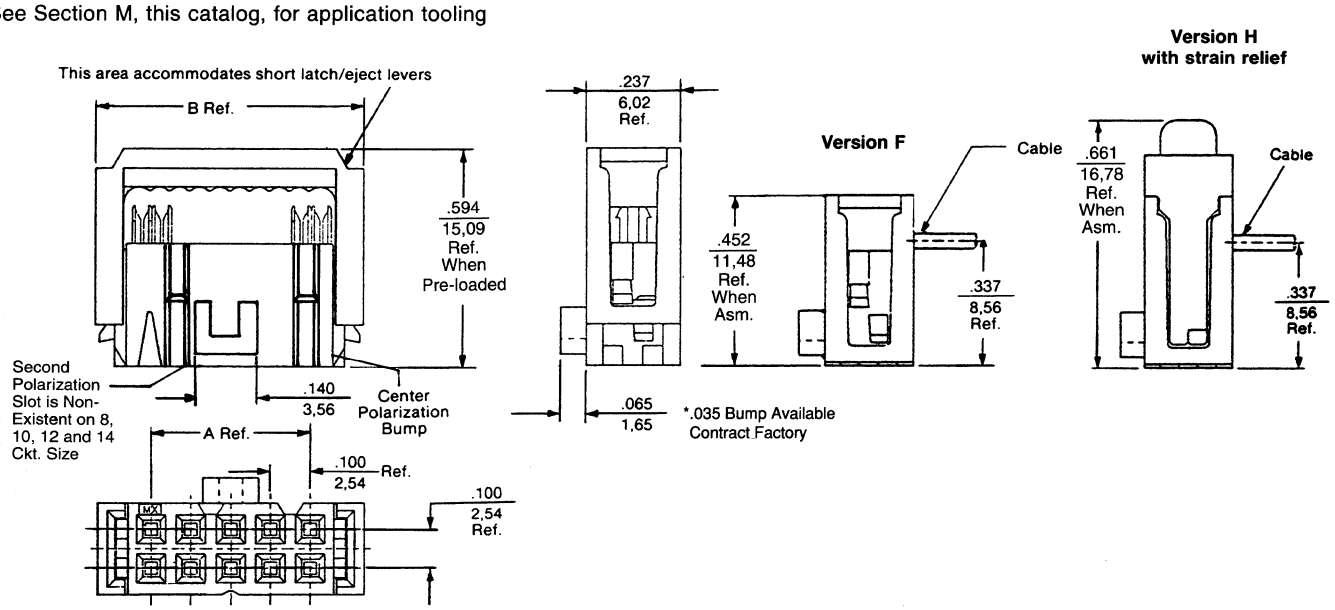
40312 Series Connector
IDT Terminal .050" (1,27 mm) Centers for Dual Row .100" (2,54 mm) Grid

- **Designed to mate with industry standard headers utilizing short latch/eject levers**
- Shipped with upper housing preloaded in convenient plastic tubes for ease of termination and handling
- Accepts AWG 26 or 28 stranded tinned and 28 AWG topcoated wire
- Chamfered pin lead ins
- Various packaging options for ease of termination and handling. Packaging also available for Molex AM63200, Shields® 921 and Shields® 805
- Duplex plated
- Optional strain relief
- Terminates .050" (1,27mm) center ribbon cable
- Center polarization
- **Locking IDT section for upper housing**
- Mates with .025" square or round pin, mating length .220" to .310"



CENTER POLARIZATION
Version F shown terminated to ribbon cable.

See Section M, this catalog, for application tooling



Dimensions

Circuits	Dim A	Dim B	Circuits	Dim A	Dim B	Circuits	Dim A	Dim B	Circuits	Dim A	Dim B
8	.300 7,62	.573 14,55	20	.900 22,86	1.173 29,79	30	1.400 35,56	1.673 42,49	44	2.100 53,34	2.373 60,27
10	.400 10,16	.673 17,09	24	1.100 27,94	1.378 34,87	34	1.600 40,64	1.873 47,57	50	2.400 60,96	2.673 67,89
12	.500 12,70	.773 19,63	26	1.200 30,48	1.473 37,41	36	1.700 43,18	1.973 50,11	60	2.900 73,66	3.173 80,59
14	.600 15,24	.873 22,17	28	1.300 33,02	1.573 39,95	40	1.900 48,26	2.173 55,19	64	3.100 78,74	3.373 85,67
16	.700 17,78	.973 24,74									

Ordering Information - Tube Packaged for AM60556

Plating Options	Center Polarization	
	VERSION F Connector w/o Strain Relief	VERSION H Same as "F" But With Strain Relief
15 Microinches Min. Selective Gold	• 15-29-79**XX**	• 15-29-97**XX**
30 Microinches Min. Selective Gold	• 15-29-80**XX**	• 15-29-98**XX**
150 Microinches Min. Overall Tin/Lead	• 15-38-8**XX**6	• 15-29-99**XX**

Contact factory for part numbers packaged for automatic termination (AM63200/Osprey)

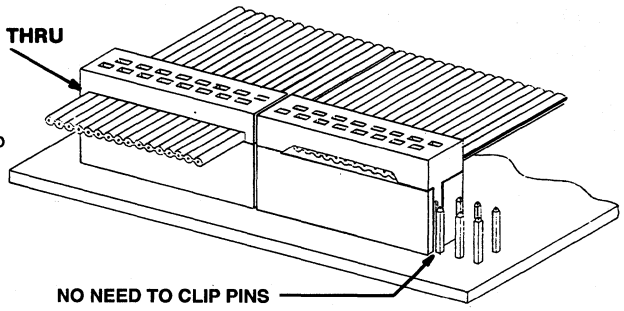
Replace "**XX**" with number of circuits desired (8, 10, 12, 14, 16, 20, 24, 26, 28, 30, 34, 36, 40, 44, 50, 60, 64). Contact factory for other circuit sizes.
• U.S. Standard Product, available through Molex franchised distributors.
Optional Loose Strain Relief: Consult Factory
Optional Polarizing Insert - 20 Pieces per Strip: 15-04-0292

Recommended Molex Ribbon Cable for use with 40312 Series: Eng. Nos. 6800, 8863, 40158.

MX 50 Slimline .050" (1,27 mm) Center Ribbon Cable Connector

B

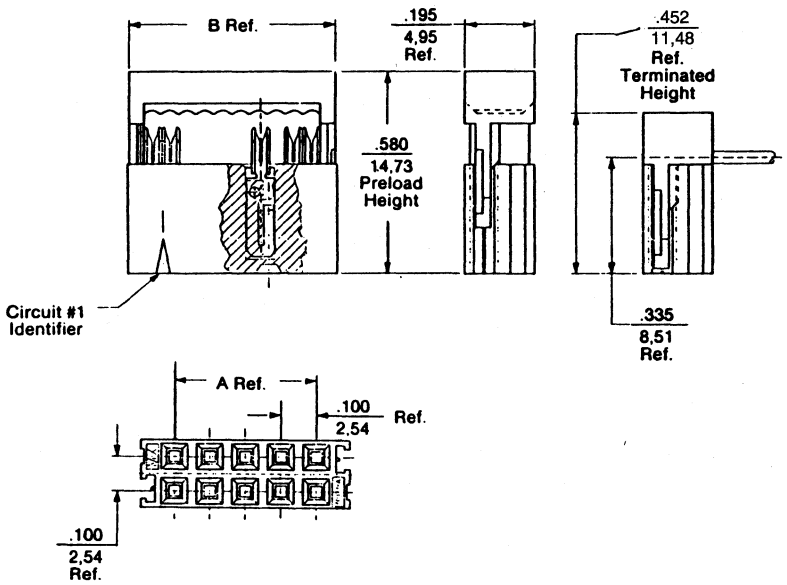
70121/71891 Series
Feed-Through Version



- Scalloped upper housing for positive cable registration
- Chamfered, closed entry pin windows provide lead-in for mating pin
- Upper housing pre-loaded
- Feed-through upper housing for conventional daisy chaining
- Mates with .025" square pins
- Standard packaging-tubes Packaging also available for Molex AM63200, Shields® 921 or Shields® 805
- Ideal for cable connection to back panel pin fields
- Accepts AWG 26 or 28 stranded tinned and 28 AWG topcoated wire
- **Locking IDT section for upper housing**
- When stacking end-to-end only two pin circuits are lost, not four. And though lost, they are not removed, but are enveloped by molded pockets in the housing
- Mates with: 8624, 70260, 70203, 70216, 70287, 70524, and 70289

See Section M, this catalog, for application tooling

70121 - Standard Slimline
71891 - Provides passive retention and vibration damping on .025" square pins.



The 10 and 12 circuit connector is available with center polarizing bump.

Delivered on a carrier with 20 pieces per strip.

Actual Size



Universal Polarizing Pin 40713-1

Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
6	.200 5,08	.390 9,91	14	.600 15,24	.790 20,07	26	1.200 30,46	1.390 35,31	40	1.900 48,26	2.090 53,09
8	.300 7,62	.490 12,45	16	.700 17,78	.890 22,61	30	1.400 35,56	1.590 40,39	50	2.400 60,96	2.590 65,97
10	.400 10,16	.590 14,99	20	.900 22,86	1.090 27,69	34	1.600 40,64	1.790 45,47	60	2.900 73,66	3.090 78,49
12	.500 12,70	.690 17,53	24	1.100 27,94	1.290 32,77	36	1.700 43,18	1.890 48,01	64	3.100 76,74	3.290 83,57

Ordering Information - Tube Packaged for AM60556. Contact factory for part numbers packaged for automatic assembly.

Series	15 Microinches Gold Plating Order No.	30 Microinches Gold Plating Order No.	150 Microinches Tin/Lead Plating Order No.
70121	• 15-47-3XX1	• 15-47-3XX2	• 15-47-3XX5
71891	• 15-47-2XX7	• 15-47-2XX6	• 15-47-1XX9
To order, replace "XX" in Order No. with circuit size desired: 6, 8, 10, 12, 14, 16, 20, 24, 26, 30, 34, 36, 40, 50, 60, 64			

• U.S. Standard Product, available through Molex franchised distributors.

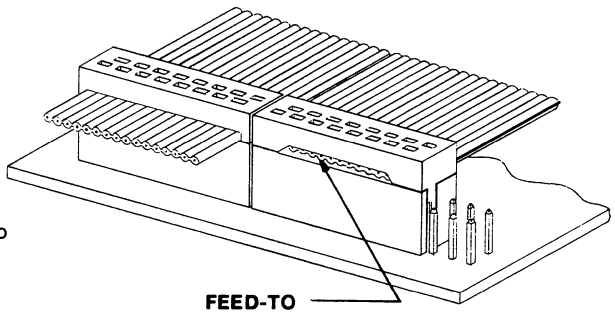
Recommended Molex Ribbon Cable for use with 70121 Series: Eng. Nos. 6800, 8863, 40158.

MX 50 Slimline .050" (1,27 mm) Center Ribbon Cable Connector

B

70121/71891 Series
Feed-To Version

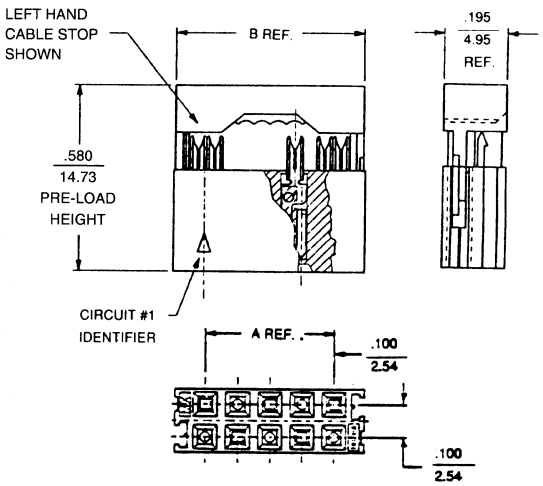
- Scalloped upper housing for positive cable registration
- Chamfered, closed entry pin windows provide lead-in for mating pin
- Upper housing pre-loaded
- Feed-to upper housing for dense packaging designs
- Mates with .025" square pins
- Standard packaging-tubes Packaging also available for Molex AM63200, Shields® 921 or Shields® 805
- Ideal for cable connection to back panel pin fields
- Accepts AWG 26 or 28 stranded tinned and 28 AWG topcoated wire
- Available with right or left-hand cable stop
- Center polarization feature available. Contact factory
- **Locking IDT section for upper housing**
- When stacking end-to-end only two pin circuits are lost, not four. And though lost, they are not removed, but are enveloped by molded pockets in the housing
- MX 50 Slimline provides a feed-to-option for side-to-side stackability, and protection from shorting
- Mates with: 8624, 70260, 70203, 70216, 70287, 70524, and 70289



NOTE: **RIGHT-HAND:**
Upper housing cable stop feature located on side of connector opposite from Circuit #1 identifier

LEFT-HAND:
Upper housing cable stop feature located on side of connector with Circuit #1 identifier

70121 - Standard Slimline
71891 - Provides passive retention and vibration damping on .025" square pins



The 10 and 12 circuit connector is available with center polarizing bump.

Delivered on a carrier with 20 pieces per strip.

Actual Size

Universal Polarizing Pin 40713-1

Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
6	.200 5,08	.390 9,91	14	.600 15,24	.790 20,07	26	1.200 30,46	1.390 35,31	40	1.900 48,26	2.090 53,09
8	.300 7,62	.490 12,45	16	.700 17,78	.890 22,61	30	1.400 35,56	1.590 40,39	50	2.400 60,96	2.590 65,97
10	.400 10,16	.590 14,99	20	.900 22,86	1.090 27,69	34	1.600 40,64	1.790 45,47	60	2.900 73,66	3.090 78,49
12	.500 12,70	.690 17,53	24	1.100 27,94	1.290 32,77	36	1.700 43,18	1.890 48,01	64	3.100 76,74	3.290 83,57

Ordering Information - Tube Packaged for AM60556. Contact factory for part numbers packaged for automatic assembly.

Series	Plating Options	FEED TO	
		Right-Hand Cable Stop	Left-Hand Cable Stop
70121	15 Microinches Min. Selective Gold	•15-47-3XX3	•15-99-5XX0
	30 Microinches Min. Selective Gold	•15-47-3XX4	•15-99-5XX1
	150 Microinches Min. Overall Tin/Lead	•15-47-3XX6	•15-99-5XX2
71891	15 Microinches Min. Selective Gold	•15-47-2XX8	•15-99-3XX7
	30 Microinches Min. Selective Gold	•15-47-2XX9	•15-99-3XX9
	150 Microinches Min. Overall Tin/Lead	•15-47-72XX	•15-99-74XX

Replace "**XX**" with number of circuits desired (6, 8, 10, 12, 14, 16, 20, 24, 26, 30, 34, 36, 40, 50, 64)
•U.S. Standard Product, available through Molex franchised distributors

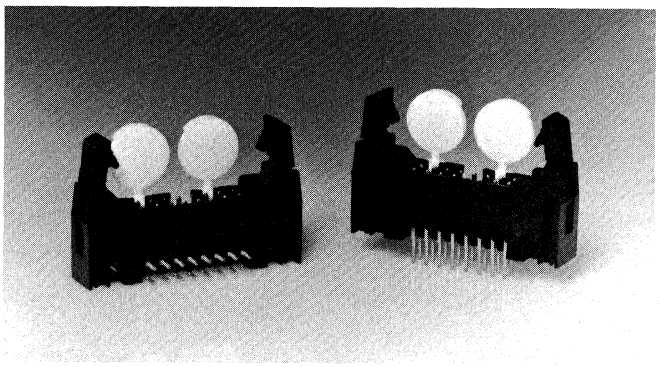
Recommended Molex Ribbon Cable for use with 70121 Series: Eng. Nos. 6800, 8863, 40158.

MX 50 Header
.100" x .100" (2,54 x 2,54 mm)

B

40501 Series
Fully Shrouded Dual Row Header Versions "A", "B" and "C"

- Optional insertable polarization or molded-in (MIL-C-83503-style)
- Polarization slot provided to accommodate connector with optional center polarization
- Two lengths of printed circuit board solder tails available
- No. 1 circuit identification molded-in
- Latches can be easily snapped in by hand
- Circuit sizes 10, 14, 16, 20, 24, 26, 30, 34, 36, 40, 50, 60 and 64. Contact factory for other sizes.
- Duplex plated
- Minimal latch/eject lever movement saves board space. Can be mounted side-by-side
- Pins: .025" (0,64mm) square mating end; .025"/.030" round p.c. tail

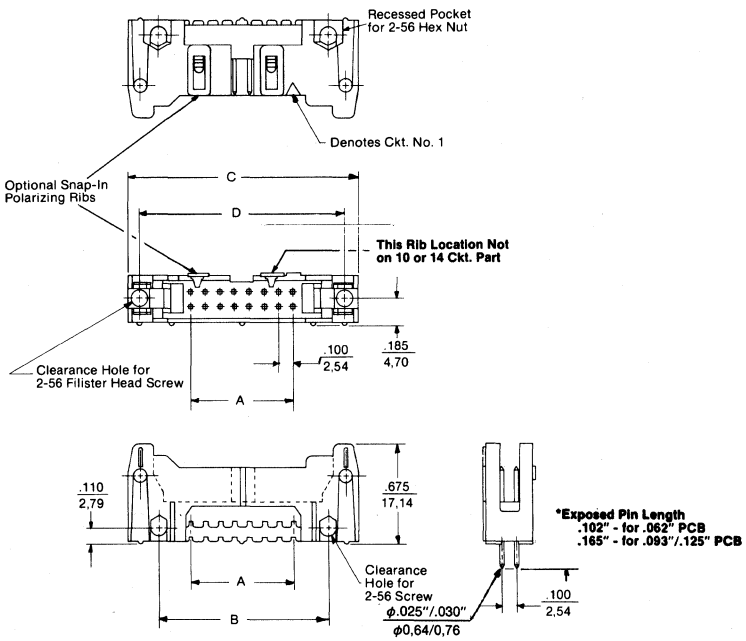


40501 Series

"A" Version
No Latch/Eject Lever

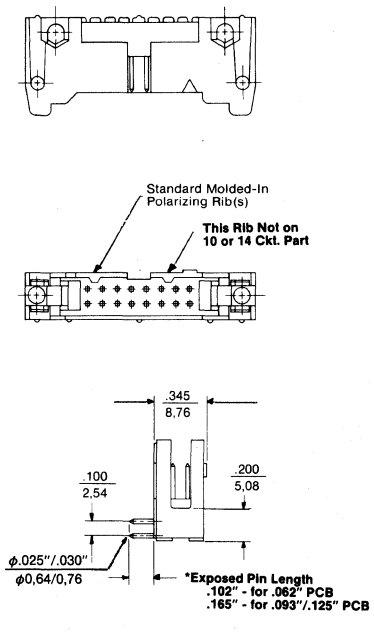
- Available with straight or right angle pins

With Optional Insertable Polarization

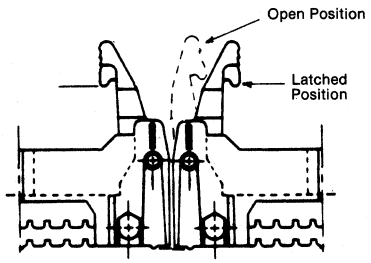


Straight Pin Version

With Standard Molded-In Polarizing Ribs (MIL-C-83503 Style)



Right Angle Pin Version



Unique latch design allows end-to-end stacking.
Latch movement does not extend beyond edge of connector.

MX 50 Header
.100" x .100" (2,54 mm x 2,54 mm)

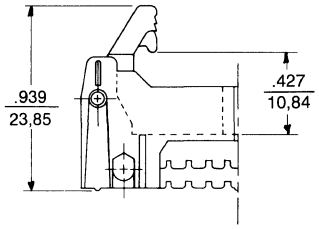
molex®

40501 Series
Fully Shrouded Dual Row Header

B

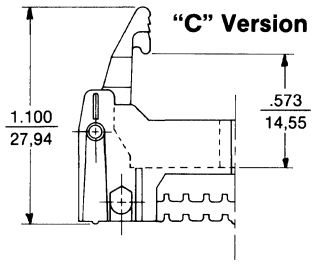
"B" Version
with Short Latch/Eject Lever, No Strain Relief

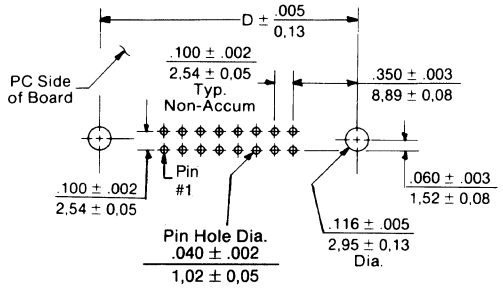
- Available with straight or right angle pins
- Mates with Molex 40312 Series connectors "E" and "F" versions



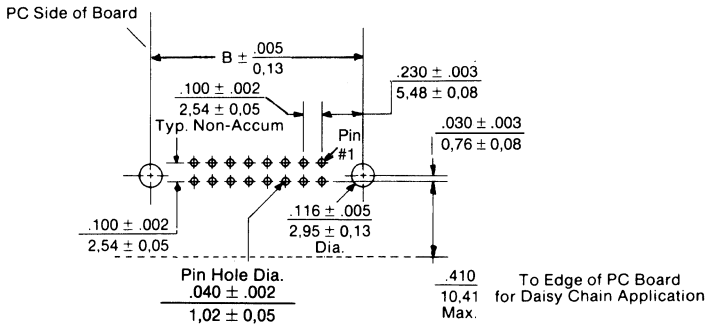
"C" Version
with Long Latch/Eject Levers; For Use with Strain Relief

- Available with straight or right angle pins
- Mates with Molex 40312 Series connectors "G" and "H" versions, and 70450 Series "D" & "E" versions





Recommended PC Board Pattern Straight Version



Recommended PC Board Pattern Right Angle Version

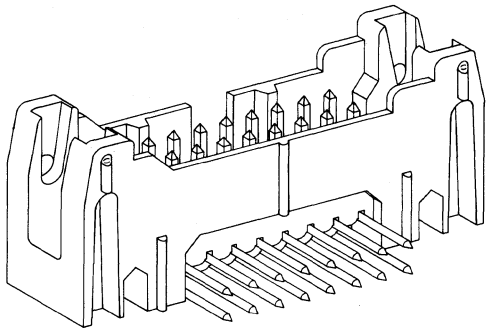
Dimensions "A", "B", & "C" Versions

Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Circuits	Dim. A	Dim. B	Dim. C	Dim. D
10	.400 ± .007 10,16 ± 0,18	.860 ± .008 21,84 ± 0,20	1.260 ± .009 32.00 ± 0,23	1.100 ± .009 27,94 ± 0,23	34	1.600 ± .010 40,64 ± 0,25	2.060 ± .011 52,32 ± 0,28	2.460 ± .012 62,48 ± 0,30	2.300 ± .012 58,42 ± 0,30
14	.600 ± .008 15,24 ± 0,20	1.060 ± .009 26,92 ± 0,23	1.460 ± .009 37,08 ± 0,23	1.300 ± .009 33,02 ± 0,23	36	1.700 ± .011 43,18 ± 0,28	2.160 ± .011 54,86 ± 0,28	2.560 ± .012 65,02 ± 0,30	2.400 ± .012 60,96 ± 0,30
16	.700 ± .008 17,78 ± 0,20	1.160 ± .009 29,46 ± 0,23	1.560 ± .010 39,62 ± 0,25	1.400 ± .009 35,56 ± 0,23	40	1.900 ± .011 48,26 ± 0,28	2.360 ± .012 59,94 ± 0,30	2.760 ± .012 70,10 ± 0,30	2.600 ± .012 66,04 ± 0,30
20	.900 ± .009 22,86 ± 0,23	1.360 ± .009 34,54 ± 0,23	1.760 ± .010 44,70 ± 0,25	1.600 ± .010 40,64 ± 0,25	50	2.400 ± .012 60,96 ± 0,30	2.860 ± .012 72,64 ± 0,30	3.260 ± .014 82,80 ± 0,36	3.100 ± .014 78,74 ± 0,36
24	1.100 ± .009 27,94 ± 0,23	1.560 ± .010 39,62 ± 0,25	1.960 ± .011 49,78 ± 0,28	1.800 ± .010 45,72 ± 0,25	60	2.900 ± .012 73,66 ± 0,30	3.360 ± .014 85,34 ± 0,36	3.760 ± .014 95,50 ± 0,36	3,600 ± .014 91,44 ± 0,36
26	1.200 ± .009 30,48 ± 0,23	1.660 ± .010 42,16 ± 0,25	2.060 ± .011 52,32 ± 0,28	1.900 ± .011 48,26 ± 0,28	64	3.100 ± .013 78,74 ± 0,33	3.560 ± .015 90,42 ± 0,38	3.960 ± .015 100,58 ± 0,38	3.800 ± .015 96,52 ± 0,38
30	1.400 ± .010 25,56 ± 0,25	1.860 ± .010 47,24 ± 0,25	2.260 ± .011 57,40 ± 0,28	2.100 ± .011 53,34 ± 0,28					

MX 50 Header

B

40501 Series
Molded-in MIL-C-83503 Style Polarization



Ordering Information

"A" Version - Without Latch/Eject Levers, Mates with 40312 with or without Strain Relief

STRAIGHT TAIL				RIGHT ANGLE TAIL			
Eng. No./Description	15 Microinches Min. Selective Gold Order No.	30 Microinches Min. Selective Gold Order No.	150 Microinches Min. Overall Tin/Lead Order No.	Eng. No./Description	15 Microinches Min. Selective Gold Order No.	30 Microinches Min. Selective Gold Order No.	150 Microinches Min. Overall Tin/Lead Order No.
40501A Solder Tail For .062" (1,57mm) PC Board	• 10-86-1XX1	• 10-86-1XX4	• 10-92-1XX1	40504A Solder Tail For .062" (1,57mm) PC Board	• 10-87-1XX1	• 10-87-1XX4	• 10-93-1XX1
40502A Solder Tail For .093"-.125" (2,36mm-3,17mm) PC Board	• 10-86-2XX1	• 10-86-2XX4	• 10-92-2XX1	40505A Solder Tail For .093"-.125" (2,36mm-3,17mm) PC Board	• 10-87-2XX1	• 10-87-2XX4	• 10-93-2XX1

"B" Version - With Short Latch/Eject Levers, Mates with 40312 without Strain Relief Version E and F

STRAIGHT TAIL				RIGHT ANGLE TAIL			
Eng. No./Description	15 Microinches Min. Selective Gold Order No.	30 Microinches Min. Selective Gold Order No.	150 Microinches Min. Overall Tin/Lead Order No.	Eng. No./Description	15 Microinches Min. Selective Gold Order No.	30 Microinches Min. Selective Gold Order No.	150 Microinches Min. Overall Tin/Lead Order No.
40501B Solder Tail For .062" (1,57mm) PC Board	• 10-86-1XX2	• 10-86-1XX5	• 10-92-1XX2	40504B Solder Tail For .062" (1,57mm) PC Board	• 10-87-1XX2	• 10-87-1XX5	• 10-93-1XX2
40502B Solder Tail For .093"-.125" (2,36mm-3,17mm) PC Board	• 10-86-2XX2	• 10-86-2XX5	• 10-92-2XX2	40505B Solder Tail For .093"-.125" (2,36mm-3,17mm) PC Board	• 10-87-2XX2	• 10-87-2XX5	• 10-93-2XX2

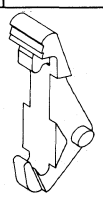
"C" Version - With Long Latch/Eject Levers, Mates with 40312 with Strain Relief Versions G and H

STRAIGHT TAIL				RIGHT ANGLE TAIL			
Eng. No./Description	15 Microinches Min. Selective Gold Order No.	30 Microinches Min. Selective Gold Order No.	150 Microinches Min. Overall Tin/Lead Order No.	Eng. No./Description	15 Microinches Min. Selective Gold Order No.	30 Microinches Min. Selective Gold Order No.	150 Microinches Min. Overall Tin/Lead Order No.
40501C Solder Tail For .062" (1,57mm) PC Board	• 10-86-1XX3	• 10-86-1XX6	• 10-92-1XX3	40504C Solder Tail For .062" (1,57mm) PC Board	• 10-87-1XX3	• 10-87-1XX6	• 10-93-1XX3
40502C Solder Tail For .093"-.125" (2,36mm-3,17mm) PC Board	• 10-86-2XX3	• 10-86-2XX6	• 10-92-2XX3	40505C Solder Tail For .093"-.125" (2,36mm-3,17mm) PC Board	• 10-87-2XX3	• 10-87-2XX6	• 10-93-2XX3

Latch/Eject Levers (Loose) - Assembles to "A" Version Series Headers

Eng. No.	Order No.	Description
71679	71679-1000	Use with mating with 40312 Connector without Strain Relief - Versions E & F
40315-02	•15-25-0106	Use with mating with 40312 Connector with Strain Relief - Versions G & H



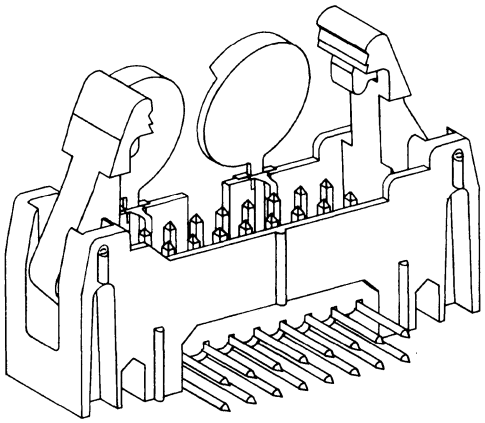


• U.S. Standard Product, available through Molex franchised distributors.

MX 50 Header

40501 Series
With Optional Insertable MIL-C-83503 Type Polarization

B



Ordering Information

"A" Version - Without Latch/Eject Levers, Mates with 40312 with or without Strain Relief

STRAIGHT TAIL				RIGHT ANGLE TAIL			
Eng. No./Description	15 Microinches Min. Selective Gold Order No.	30 Microinches Min. Selective Gold Order No.	150 Microinches Min. Overall Tin/Lead Order No.	Eng. No./Description	15 Microinches Min. Selective Gold Order No.	30 Microinches Min. Selective Gold Order No.	150 Microinches Min. Overall Tin/Lead Order No.
40507A Solder Tail For .062" (1,57mm) PC Board	• 10-86-4XX1	• 10-86-4XX4	• 10-92-4XX1	40510A Solder Tail For .062" (1,57mm) PC Board	• 10-87-4XX1	• 10-87-4XX4	• 10-93-4XX1
40508A Solder Tail For .093"-.125" (2,36mm-3,17mm) PC Board	• 10-86-5XX1	• 10-86-5XX4	• 10-92-5XX1	40511A Solder Tail For .093"-.125" (2,36mm-3,17mm) PC Board	• 10-87-5XX1	• 10-87-5XX4	• 10-93-5XX2

"B" Version - With Short Latch/Eject Levers, Mates with 40312 without Strain Relief Versions E and F

STRAIGHT TAIL				RIGHT ANGLE TAIL			
Eng. No./Description	15 Microinches Min. Selective Gold Order No.	30 Microinches Min. Selective Gold Order No.	150 Microinches Min. Overall Tin/Lead Order No.	Eng. No./Description	15 Microinches Min. Selective Gold Order No.	30 Microinches Min. Selective Gold Order No.	150 Microinches Min. Overall Tin/Lead Order No.
40507B Solder Tail For .062" (1,57mm) PC Board	• 10-86-4XX2	• 10-86-4XX5	• 10-92-4XX2	40510B Solder Tail For .062" (1,57mm) PC Board	• 10-87-4XX2	• 10-87-4XX5	• 10-93-4XX2
40508B Solder Tail For .093"-.125" (2,36mm-3,17mm) PC Board	• 10-86-5XX2	• 10-86-5XX5	• 10-92-5XX2	40511B Solder Tail For .093"-.125" (2,36mm-3,17mm) PC Board	• 10-87-5XX2	• 10-87-5XX5	• 10-93-5XX2

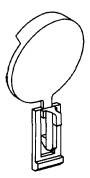
"C" Version - With Long Latch/Eject Levers, Mates with 40312 with Strain Relief Versions G and H

STRAIGHT TAIL				RIGHT ANGLE TAIL			
Eng. No./Description	15 Microinches Min. Selective Gold Order No.	30 Microinches Min. Selective Gold Order No.	150 Microinches Min. Overall Tin/Lead Order No.	Eng. No./Description	15 Microinches Min. Selective Gold Order No.	30 Microinches Min. Selective Gold Order No.	150 Microinches Min. Overall Tin/Lead Order No.
40507C Solder Tail For .062" (1,57mm) PC Board	• 10-86-4XX3	• 10-86-4XX6	• 10-92-4XX3	40510C Solder Tail For .062" (1,57mm) PC Board	• 10-87-4XX3	• 10-87-4XX6	• 10-93-4XX3
40508C Solder Tail For .093"-.125" (2,36mm-3,17mm) PC Board	• 10-86-5XX3	• 10-86-5XX6	• 10-92-5XX3	40511C Solder Tail For .093"-.125" (2,36mm-3,17mm) PC Board	• 10-87-5XX3	• 10-87-5XX6	• 10-93-5XX3

Optional Insertable Polarization for 40501 Series Headers

Eng. No.	Order No.	Description
40471	• 15-05-1005	Loose Polarizing Insert with break-off thumb tab

• U.S. Standard Product, available through Molex franchised distributors.

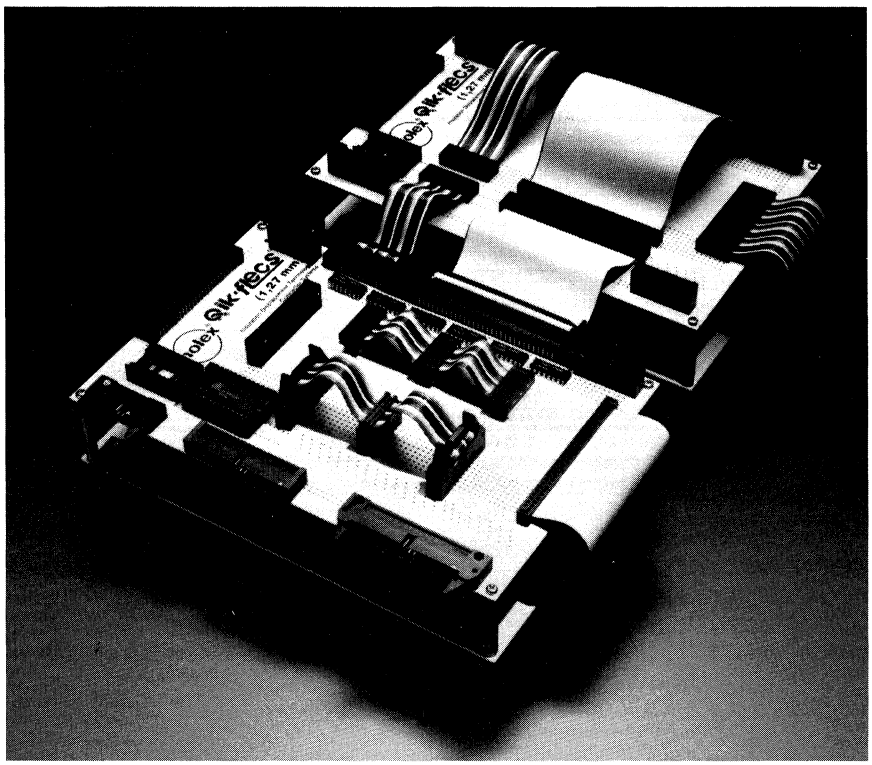


Notes

QF 50 Ribbon Cable Connector System

Contents

B



Qik-Flecs System (QF 50)

International design. Available in three styles: Standard Dual Beam Contact with four pierce points, Single Beam Contact, and Mil/Din styles.

Picoflex (PF 50)

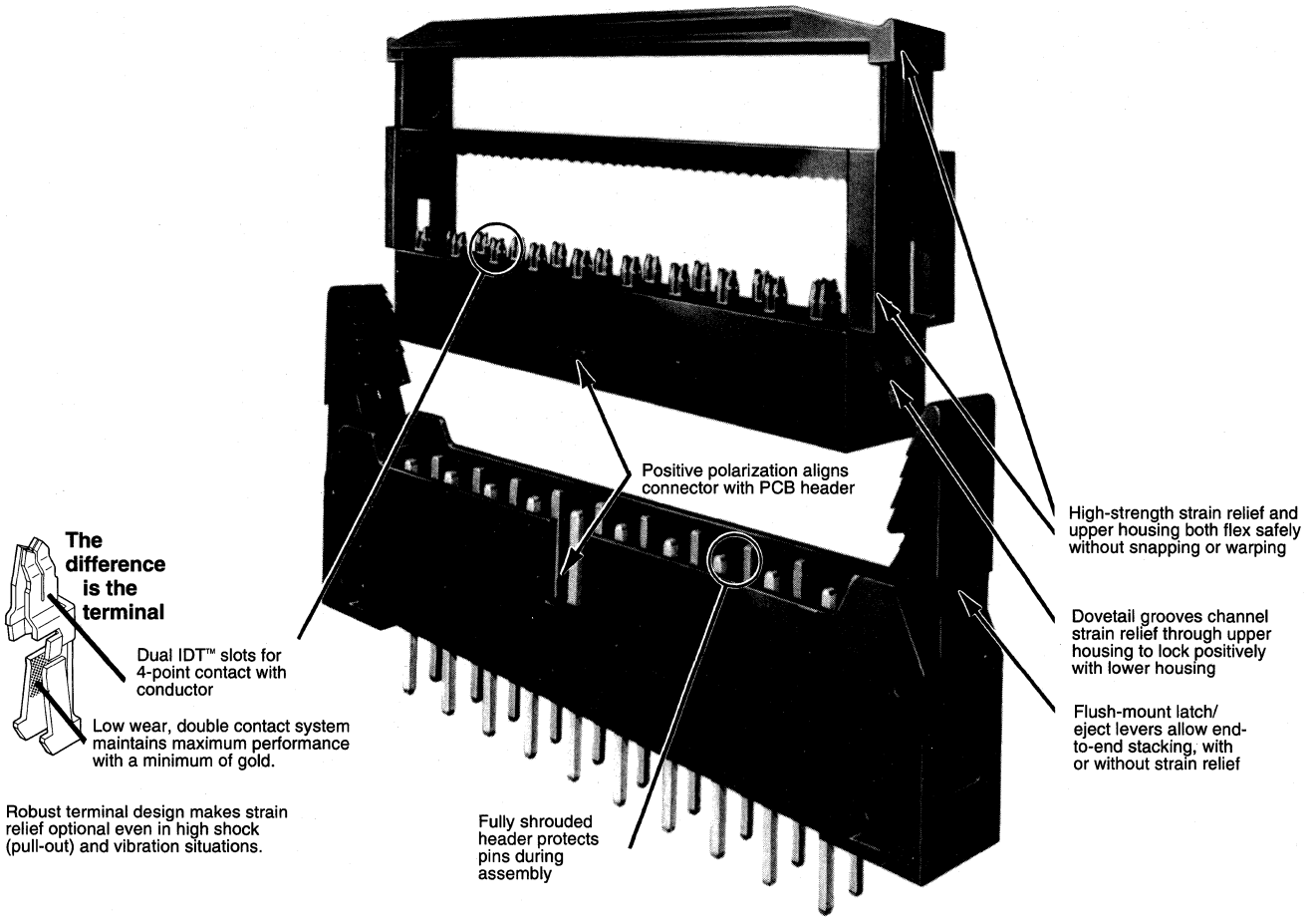
Wire-to-board IDT interconnect system. Offers substantial space savings and can be used in single ended, double ended, or daisy chain applications.

Both systems are available in overall tin or selective gold plating.

Qik-Flecs Insulation Displacement Connector System
Introduction 14B-15B
Ribbon Cable Connectors, Single Polarization 16B
Strain Relief 17B
Female Housing Assemblies 18B-20B
Printed Circuit Board Headers 21B-34B
Transition Type Connector .100" x .100" (2,54mm x 2,54mm) 35B
Picoflex (PF 50) IDT Connector and Standard Header 36B
Picoflex (PF 50) Board-In Header 37B

QF 50™ IDT Ribbon Cable Connector System

B



Molex offers one of the widest ranges of connector for 1.27mm Ribbon Cable on the market today. The QF-50 family features a variety of products conforming to industry standard styles, such as DIN 41651, MIL-C-83503 keying, HE-10, etc. There is a choice of receptacle styles, addressed to specific market requirements; headers come in a designer-friendly menu; transition connectors are offered to suit all standard applications.

All connectors are available with upper housings pre-loaded or un-loaded, to facilitate particular termination requirements, whilst offering a choice of packaging options to suit different application tooling needs - and Molex offers a range of tooling to support requirements, from prototype build to high-volume production. Dual beam versions are available in high-pressure versions if necessary.

Connectors

Built to the highest quality standards, three distinct styles are offered:

- 5320 standard product, with a dual beam contact independently acknowledged to outperform others on the market.

- Early Entry 90573, also dual contact beams, offering enhanced security in more difficult environments.

- MIL/DIN 90635, a lower cost single contact beam product, offering all the performance advantages of its dual beam counterparts, while meeting both MIL Keying and DIN requirements.

Headers

Three basic types of headers are available:

- Latch-eject headers, which have the advantage of working with the female connector with or without attached strain reliefs. Furthermore, after ejecting the assembly, the latch arm remains flush with the edge of the header, thus saving valuable board space.

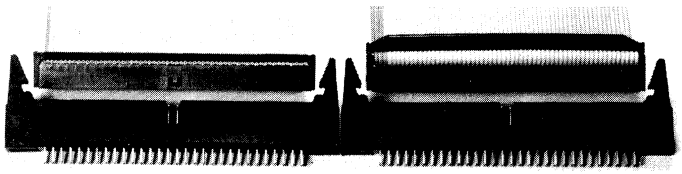
- Standard, non-eject headers

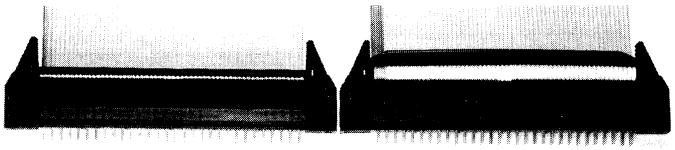
- Low Profile headers in industry standard styles, and with optional features, including SMT compatible insulators and board locator/retention pegs.

QF 50 Ribbon Cable Connector System

Ejected

Without Strain Relief **With Strain Relief**

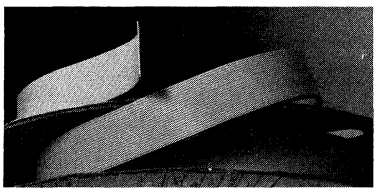




Without Strain Relief **With Strain Relief**

Latched

Cable
Compatible .050" (1,27mm) ribbon cable is available from Molex in circuit sizes 10 through 68. Offered in 28 and 26 AWG stranded tin, this cable is zippable to provide design flexibility.



All headers come with 0.025" (0.064mm) pins as standard, and like the females, come in a choice of plating styles. Headers with pins suitable for 0.8mm PCB holes are also available upon request.

Application Tooling

The cost of a connector does not end at the product price; the true cost includes the cost of getting it assembled to your PCB, or into a ribbon-cable harness. Molex has developed a choice of equipment which allows you to tailor-make your termination equipment to your own needs: be they volume or configuration. See Section "M" of this catalog.

Cable

In line with the philosophy of offering our customers a complete interconnection solution, Molex also supplies the necessary cable to get you connected!

Mating Matrix (as supplied)

Female		***Male***					
		With Eject Levers		*Shrouded*		*Low Profile*	
Description	Series	Straight	Right-Angle	Straight	Right-Angle	Straight	Right-Angle
Standard Pressure Original	5320	5576	5578	5332	5342	70246	70247
High Pressure Original	52037/8	5576	5578	5332	5342	70246	70247
Standard Pressure Early Entry	90573	90571	90572	90571	90572	90708	90709
High Pressure Early Entry	90574	90571	90572	90571	90572	90708	90709
MIL/DIN	90635	90571	90572	90571	90572	90708	90709
MIL/DIN with MIL keying	90635	90663	90663	n/a	n/a	n/a	n/a

QF 50 Technical Data Reference*

QF 50 IDT Ribbon Cable Connector

Current Rating - 1 amp maximum

Contact Resistance - 20mΩ maximum initial
Less than twice initial after conditioning

Dielectric Withstanding Voltage - 500 VAC (r.m.s.) for 60 seconds

Insulation Resistance - 1,000mΩ minimum initial
100mΩ minimum after conditioning
at 500 volts D.C.

Engagement Force - .66 lbs (300 grams) max. per circuit

Disengagement Force - .044 lbs. (20 grams) min. per circuit

Housing Retention Force to Header - 11.02 lbs. (5 Kg) min.

Pin Push Out Force - 3.3 lbs. (1.5 Kg) min.

QF 50 Transition-Type Connector

Current Rating - 1 amp maximum

Contact Resistance - 10mΩ minimum initial
Less than twice initial after conditioning

Dielectric Withstanding Voltage - 500 VAC (r.m.s.) for 60 seconds

Insulation Resistance - 1,000mΩ minimum initial
100mΩ minimum after conditioning
at 500 voilts D.C.

Housing Cover Retention Force - 11.02 lbs. (5 Kg) minimum

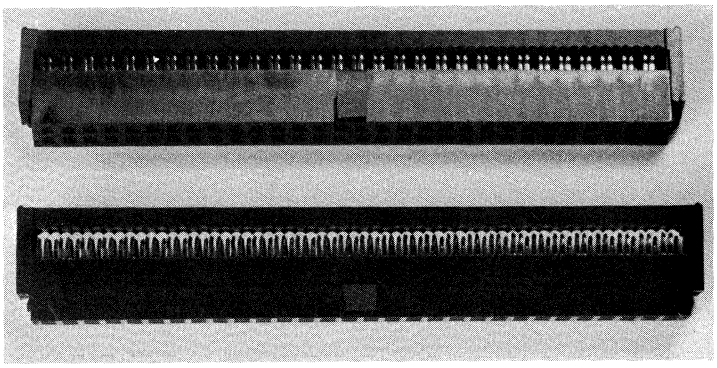
*Detailed product specifications should be requested for approval testing.

QF 50 Ribbon Cable Connector .050" (1,27 mm)

B

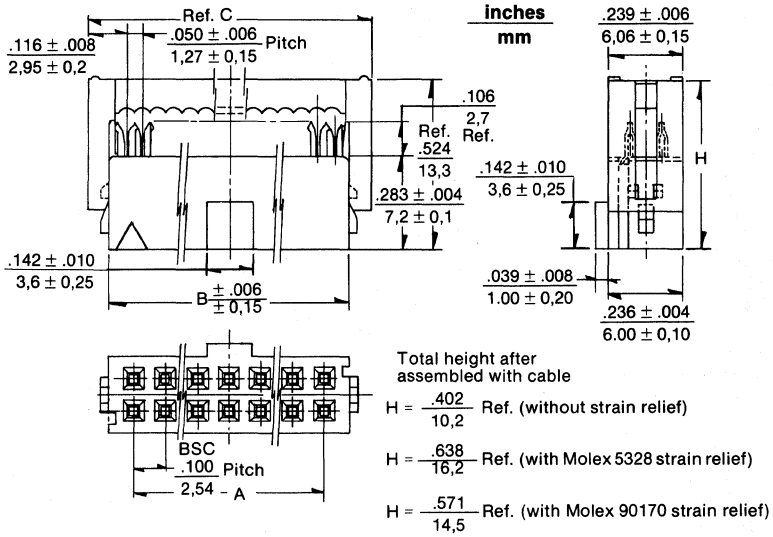
5320 Series NBGS1/NBGS2/ NBT2

Single Polarization Preloaded Upper Housing



- 10-60 Circuits
- Polarized
- 94V-0 Glass filled polyester
- Color - black
- Contact material: phosphor bronze
- Two selective gold, and overall tin plated versions
- Mates with Molex 5328 and 90170 DIN-41651 adapted strain reliefs
- Mates with Molex 5330, 5340, 5332, 5342, 5576, 70246 and 5578 headers
- Cable accommodation: .050" (1,27mm) center
  AWG #26, standed
  AWG #28, stranded and solid with .045" (1,14mm) dia. max. insulation

Refer to Section M for application tooling.



Total height after assembled with cable

H = .402 / 10,2 Ref. (without strain relief)

H = .638 / 16,2 Ref. (with Molex 5328 strain relief)

H = .571 / 14,5 Ref. (with Molex 90170 strain relief)

Dimensions 5320 Series

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
10	.400 10,16	.550 13,96	.682 17,33	26	1.200 30,48	1.350 34,28	1.482 37,65	40	1.900 48,26	2.050 52,06	2.182 55,43
14	.600 15,24	.750 19,04	.882 22,41	30	1.500 35,56	1.550 39,36	1.682 42,73	50	2.400 60,96	2.550 64,76	2.682 68,13
16	.700 17,78	.850 21,58	.982 24,95	34	1.600 40,64	1.750 44,44	1.882 47,81	60	2.900 73,66	3.050 77,46	3.182 80,83
20	.900 22,86	1.050 26,66	1.182 30,03								

5320-NBGS1 / -NBGS2 / -NBT2 Series (Pre-loaded)

Ordering Information Replace **XX** in Order No. with number of circuits required

PLATING SPECIFICATION	NBGS1	NBGS2	NBT2
Order No.	39-51-2**XX**3	39-51-2**XX**4	39-52-1**XX**5

Highlighted area denotes Molex European standard product, usually available within shorter leadtimes.

Also Available:

5320-NAGS1 / -NAGS2 / -NAT2 Series (Unloaded, Detached Upper Housing)

Ordering Information Replace **XX** in Order No. with number of circuits required

PLATING SPECIFICATION	NABS1	NABS2	NAT2
Order No.	39-51-2**XX**0	39-51-2**XX**1	39-52-1**XX**4

Plating Specifications

NBGS1 Pre-loaded Upper Housing
NAGS1 Detached Upper Housing
39 microinches (1 micron) min. nickel underplate. Contact Area: 4 microinches (0,1 micron) min. gold. ID Area: 1 micron min. tin.

NBGS2 Pre-loaded Upper Housing
NAGS2 Detached Upper Housing
39 microinches (1 micron) min. nickel underplate. Contact Area: 30 microinches (0,76 microns) min. gold. ID Area: 1 micron min. tin.

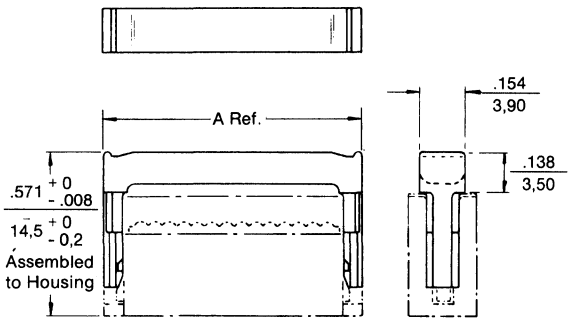
NBT2 Pre-loaded Upper Housing
NAT2 Detached Upper Housing
35 microinches (.9 micron) min. tin overall, over nickel underplate.

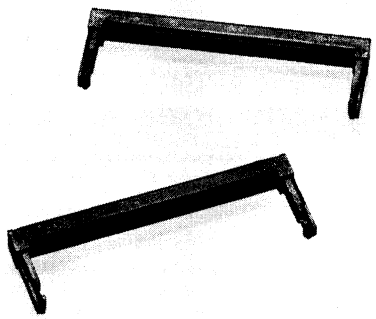
Strain Relief

Preferred Version in Europe

90170 Series
DIN 41651 Standard and Low Profile Strain Relief

- 94V-0 Glass filled polyester, black
- Mates with Molex 5320 Series housings to latch DIN 41651 dual function latch/eject levers





Dimensions 90170

Circuits*	Dim. A	Circuits*	Dim. A	Circuits*	Dim. A	Circuits*	Dim. A	Circuits*	Dim. A
10	.682 17,33	16	.982 24,92	26	1.482 37,65	34	1.882 47,81	50	2.682 68,13
14	.882 22,41	20	1.182 30,03	30	1.682 42,73	40	2.182 55,43	60	3.182 80,83

*Number of circuits on mating connector.

Ordering Information 90170 (Preferred version in Europe)

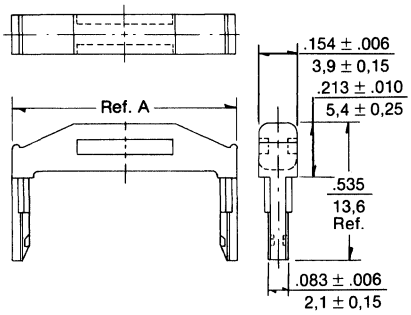
Replace **XX** in Order No. with number of circuits on mating connector: 10, 14, 16, 20, 26, 30, 34, 40, 50 or 60.

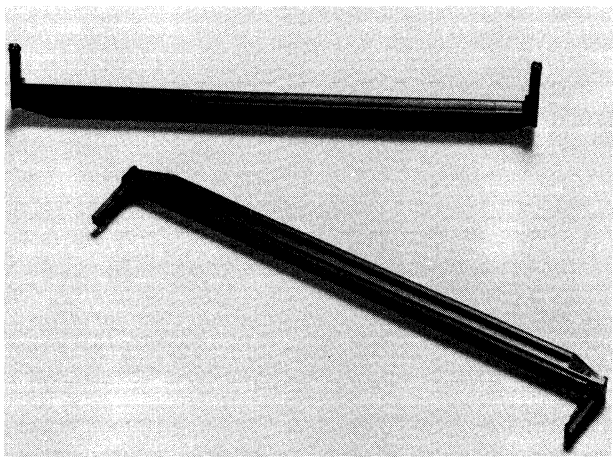
Order No.
90170-00**XX**

Primarily Available in Japan

5328 Series
Qik-Flecs Strain Relief

- 94V-0 Polyester, black
- Symmetrical
- Used with Molex 5320 series connectors





Dimensions 5328

Circuits*	Dim. A	Circuits*	Dim. A	Circuits*	Dim. A	Circuits*	Dim. A	Circuits*	Dim. A	Circuits*	Dim. A
10	.682 17,33	16	.982 24,95	26	1.482 37,65	34	1.882 47,81	50	2.682 68,13	60	3.182 80,83
14	.882 22,41	20	1.782 30,03	30	1.682 42,73	40	2.182 55,43				

*Number of circuits on mating connector.

Ordering Information 5328 (Preferred version in Japan)

Replace **XX** in Order No. with number of circuits on mating connector: 10, 14, 16, 20, 26, 30, 34, 40, 50, or 60.

Order No.
15-25-1**XX**3

QF 50 Ribbon Cable Connector .050" (1,27mm)

B

90573 Series
Vertical Early Entry

- 10-64 Circuits
- Keyed and polarized
- Complies with industry standard DIN41651
- Reverse dual beam, enhanced security
- Selective gold plating option for contacts
- Cable Accommodation: AWG # 26 - #28 stranded AWG #28 solid
- Mates with: 90571/90572 90708/90709

Specifications

Housing: Glass filled polyester 94 V-0

Terminal: Copper alloy

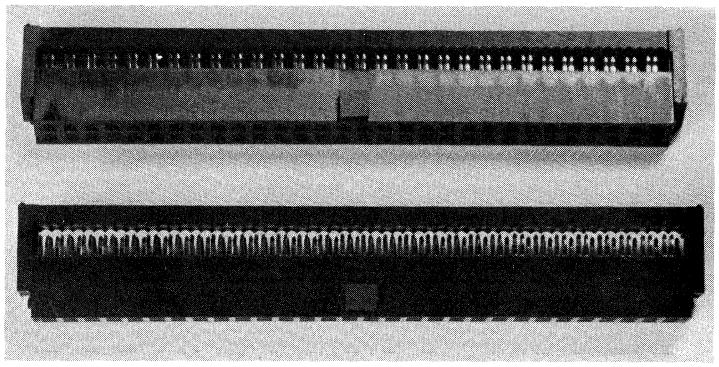
Voltage: 250

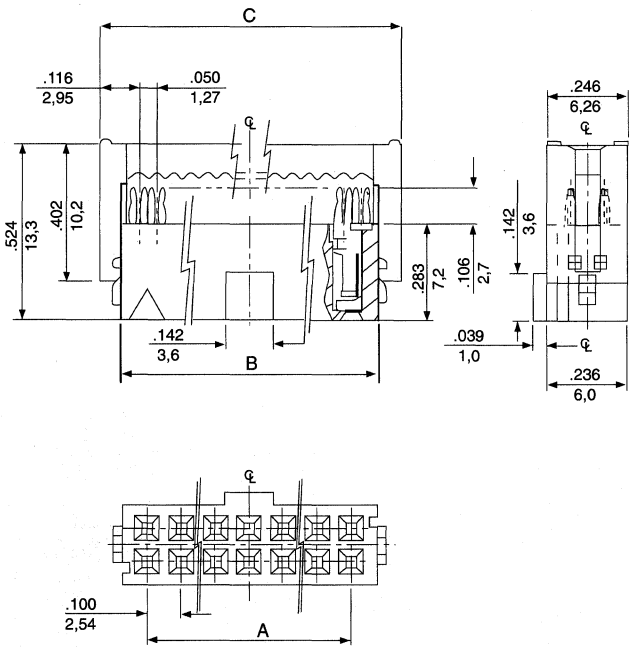
Current: 1 A

Insulation Resistance: 1000 megohm

Contact Resistance: 20 milliohm

Dielectric Strength: 500 VAC for one minute





Dimensions 90573 Series

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
10	.400 10,16	.550 13,96	.682 17,33	26	1.200 30,48	1.350 34,28	1.482 37,65	50	2.400 60,96	2.550 64,76	2.682 68,13
14	.600 15,24	.750 19,04	.882 22,41	30	1.400 35,56	1.550 39,36	1.682 42,73	60	2.900 73,66	3.050 77,46	3.182 80,83
16	.700 17,78	.850 21,58	.982 24,95	34	1.600 40,64	1.750 44,44	1.882 47,81	64	3.100 78,74	3.250 82,54	3.382 85,91
20	.900 22,86	1.050 26,66	1.182 30,03	40	1.900 48,26	2.050 52,06	2.182 55,43				

Ordering Information Replace **XX** in Order No. with number of circuits required.

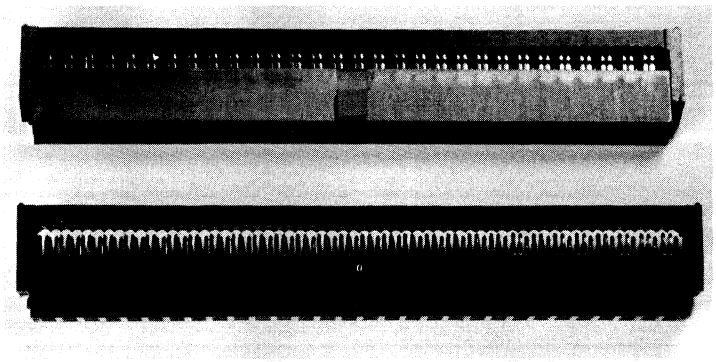
Plating Specification	Plating 1	Plating 2	Plating 3
Order No.	90573-1**XX**1	90573-1**XX**2	90573-1**XX**3

Plating 1: Contact area: 4 microinches Gold flash min. IDT area: 39 microinches min. tin/lead over nickel
Plating 2: Contact area: 30 microinches Gold min. IDT area: 39 microinches min. tin/lead over nickel
Plating 3: Contact Area: 10 microinches Gold min. IDT area: 39 microinches tin/lead over nickel

QF 50 Ribbon Cable Connector .050" (1,27mm)

B

90574 Series
Vertical High Pressure Version



- 10-64 Circuits
- Keyed and polarized
- Complies with industry standard DIN 41651
- Reverse dual beam, enhanced security
- Selective gold plating options for contacts
- Cable Accommodation: AWG # 26 - #28 stranded AWG #28 solid
- Mates with: 90571/90572 90708/90709

Specifications

Housing: Glass filled polyester 94 V-0

Terminal: Copper alloy

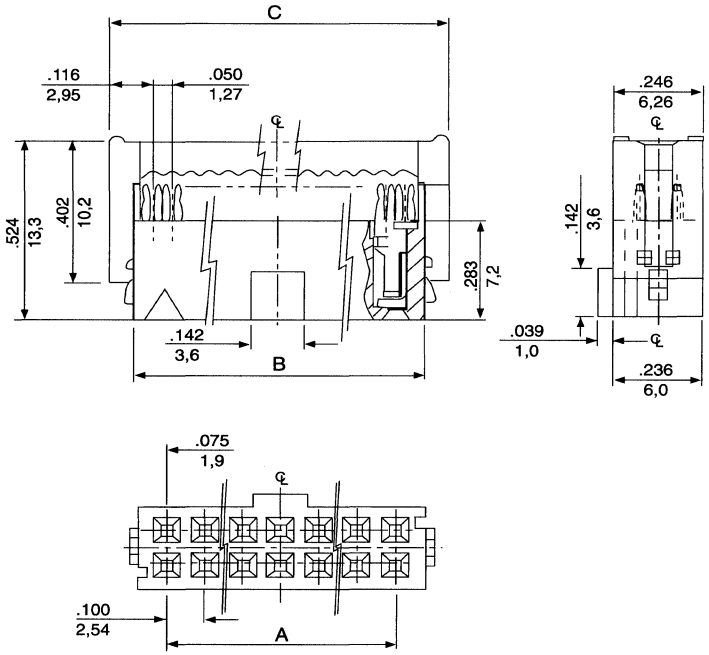
Voltage: 250

Current: 1 A

Insulation Resistance: 1000 megohm

Contact Resistance: 20 milliohm

Dielectric Strength: 500 VAC for one minute



Dimensions 90574 Series

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
10	.400 10,16	.550 13,96	.682 17,33	26	1.200 30,48	1.350 34,28	1.482 37,65	50	2.400 60,96	2.550 64,76	2.682 68,13
14	.600 15,24	.750 19,04	.882 22,41	30	1.400 35,56	1.550 39,36	1.682 42,73	60	2.900 73,66	3.050 77,46	3.182 80,83
16	.700 17,78	.850 21,58	.982 24,95	34	1.600 40,64	1.750 44,44	1.882 47,81	64	3.100 78,74	3.250 82,54	3.382 85,91
20	.900 22,86	1.050 26,66	1.182 30,03	40	1.900 48,26	2.050 52,06	2.182 55,43				

Ordering Information Replace **XX** in Order No. with number of circuits required.

Plating Specification	Plating 1	Plating 2	Plating 3
Order No.	90574-1XX1	90574-1XX2	90574-1XX3

Plating 1: Contact area: 4 microinches Gold flash min. IDT area: 39 microinches min. tin/lead over nickel
Plating 2: Contact area: 30 microinches Gold min. IDT area: 39 microinches min. tin/lead over nickel
Plating 3: Contact area: 10 microinches Gold min. IDT area: 39 microinches tin/lead over nickel

QF 50 Ribbon Cable Connector .050" (1,27mm)

B

90635 Series
Vertical MIL / DIN

- 10-64 Circuits
- Available with or without polarization
- Complies with industry standard DIN 41651 and MIL requirements
- Selective gold plating option for contacts
- Cable Accommodation: AWG # 26 - #28 stranded AWG #28 solid
- Mates with: 90571/90572 90663/90708/90709

Specifications

Housing: Glass filled polyester 94 V-0

Terminal: Copper alloy

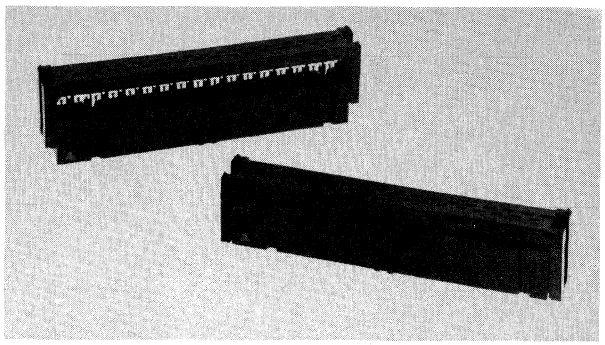
Voltage: 250

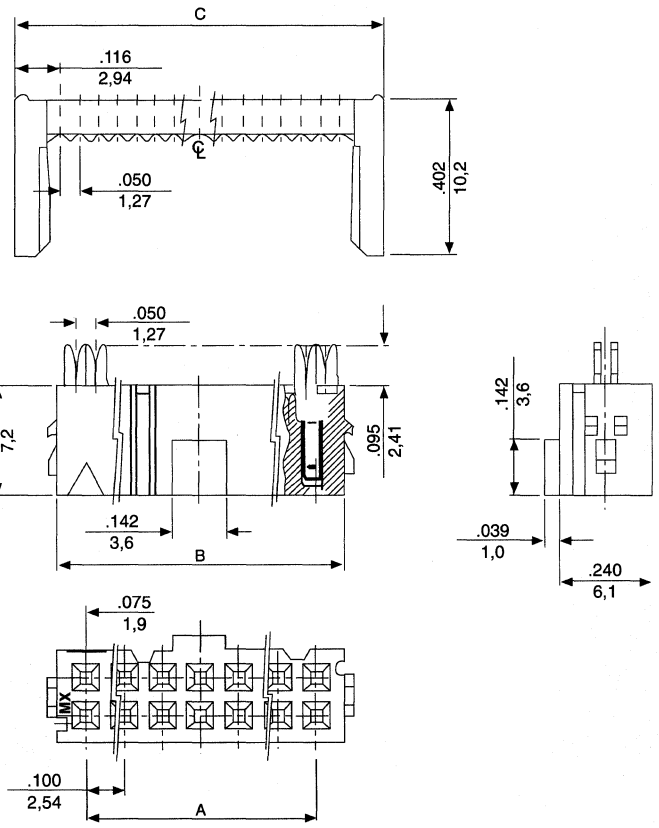
Current: 1 A

Insulation Resistance: 1000 megohm

Contact Resistance: 20 milliohm

Dielectric Strength: 500 VAC for one minute





Dimensions 90635 Series

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
10	.400 10,16	.550 13,96	.681 17,30	24	1.100 27,94	1.250 31,74	1.381 35,08	40	1.900 48,26	2.050 52,06	2.181 55,40
14	.600 15,24	.750 19,04	.881 22,38	26	1.200 30,48	1.350 34,28	1.481 37,62	50	2.400 60,96	2.550 64,76	2.681 68,10
16	.700 17,78	.850 21,58	.981 24,92	30	1.400 35,56	1.550 39,36	1.681 42,70	60	2.900 73,66	3.050 77,46	3.181 80,80
20	.900 22,86	1.050 26,66	1.181 30,00	34	1.600 40,64	1.750 44,44	1.881 47,78	64	3.100 78,74	3.250 82,54	3.381 85,88

Ordering Information - With Polarization

Replace **XX** in Order No. with number of circuits required.

Plating Specification	Plating 1	Plating 2	Plating 3
Order No.	90635-1**XX**1	90635-1**XX**2	90635-1**XX**3

Ordering Information - Without Polarization

Replace **XX** in Order No. with number of circuits required.

Plating Specification	Plating 1	Plating 2	Plating 3
Order No.	90635-3**XX**1	90635-3**XX**2	90635-3**XX**3

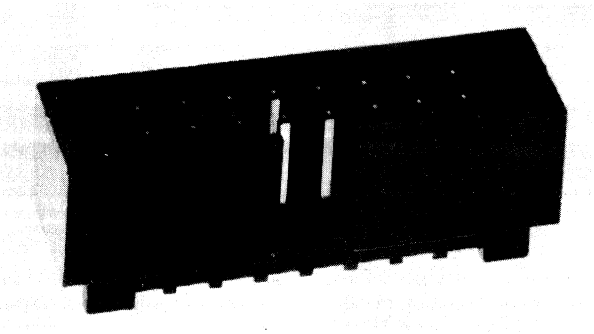
Plating 1: Contact area: 4 microinches Gold flash min. IDT area: 39 microinches min. tin/lead over nickel
Plating 2: Contact area: 30 microinches Gold min. IDT area: 39 microinches min. tin/lead over nickel
Plating 3: Contact Area: 10 microinches Gold min. IDT area: 39 microinches tin/lead over nickel

.100" (2,54mm) Dual Row Header

molex

B

90708 Series
Vertical Low Profile, Shrouded Header, Extended Plating



- 10-64 Circuits
- Polarized
- Complies with industry standard
- Selective gold plating options for contacts
- Mates with: 5230/90573/ 90635
- Available with standard plating. See Molex Series 70246 and 70247, Section A, this catalog

Specifications

Housing: Glass filled polyester 94 V-0

Terminal: Copper alloy

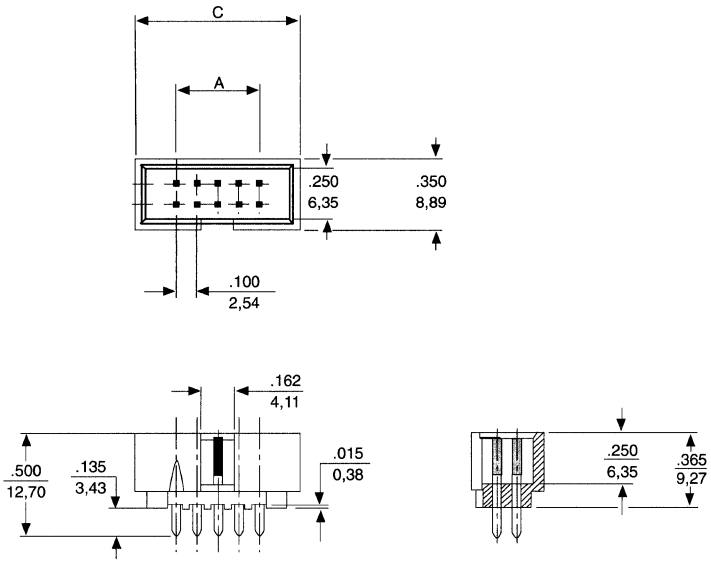
Voltage: 250

Current: 2.5 A

Insulation Resistance: 1000 megohm

Contact Resistance: 20 milliohm

Dielectric Strength: 600 VAC for one minute



Dimensions 90708 Series

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
10	.400 10,16	.680 17,27	.800 20,32	26	1.200 30,48	1.480 37,59	1.600 40,64	50	2.400 60,96	2.680 68,07	2.800 71,12
14	.600 15,24	.880 22,35	1.000 25,40	30	1.400 35,56	1.680 42,67	1.800 45,72	60	2.900 73,66	3.180 80,77	3.300 83,82
16	.700 17,78	.980 24,89	1.100 27,94	34	1.600 40,64	1.880 47,75	2.000 50,80	64	3.100 78,74	3.380 85,85	3.500 88,90
20	.900 22,86	1.180 29,97	1.300 33,02	40	1.900 48,26	2.180 55,37	2.300 58,42				

Ordering Information Replace **XX** in Order No. with number of circuits required.

Plating Specification	Plating 1	Plating 2
Order No.	90708-**XX**01	90708-**XX**02

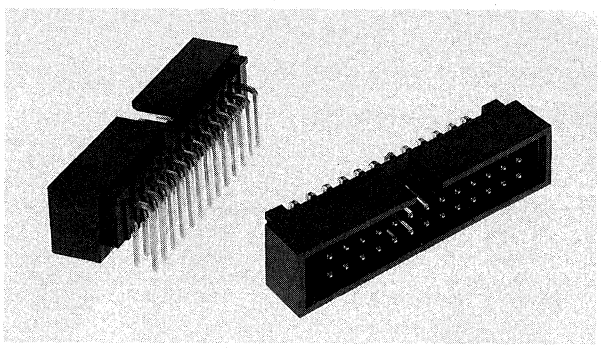
Plating 1: 15 microinches Gold in select area, 75 microinches tin/lead over 50 microinches nickel overall
Plating 2: 30 microinches Gold in select area, 75 microinches tin/lead over 50 microinches nickel overall

.100" (2,54mm) Dual Row Header

B

90709 Series

Right Angle Low Profile, Shrouded Header, Extended Plating



- 10-64 Circuits
- Polarized
- Complies with industry standard
- Selective gold plating options for contacts
- Mates with: 5230/90573/90635
- Available with standard plating. See Molex Series 70246 and 70247, Section A, this catalog

Specifications

Housing: Glass filled polyester 94 V-0

Terminal: Copper alloy

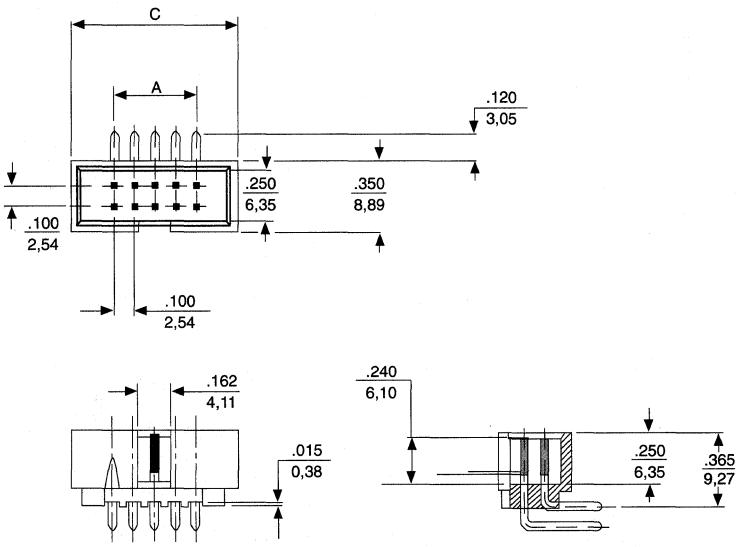
Voltage: 250

Current: 2.5 A

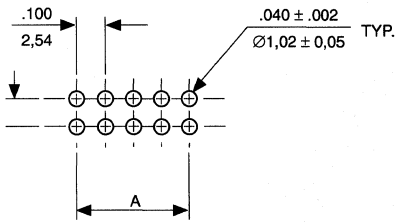
Insulation Resistance: 1000 megohm

Contact Resistance: 20 milliohm

Dielectric Strength: 600 VAC for one minute



PCB LAYOUT



Dimensions 90709 Series

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
10	.400 10,16	.680 17,27	.800 20,32	26	1.200 30,48	1.480 37,59	1.600 40,64	50	2.400 60,96	2.680 68,07	2.800 71,12
14	.600 15,24	.880 22,35	1.000 25,40	30	1.400 35,56	1.680 42,67	1.800 45,72	60	2.900 73,66	3.180 80,77	3.300 83,82
16	.700 17,78	.980 24,89	1.100 27,94	34	1.600 40,64	1.880 47,75	2.000 50,80	64	3.100 78,74	3.380 85,85	3.500 88,90
20	.900 22,86	1.180 29,97	1.300 33,02	40	1.900 48,26	2.180 55,37	2.300 58,42				

Ordering Information Replace **XX** in Order No. with number of circuits required.

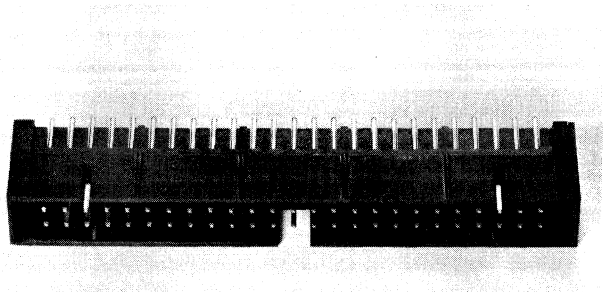
Plating Specification	Plating 1	Plating 2
Order No.	90709-**XX**01	90709-**XX**02

Plating 1: 15 microinches Gold in select area, 75 microinches tin/lead over 50 microinches nickel overall
Plating 2: 30 microinches Gold in select area, 75 microinches tin/lead over 50 microinches nickel overall

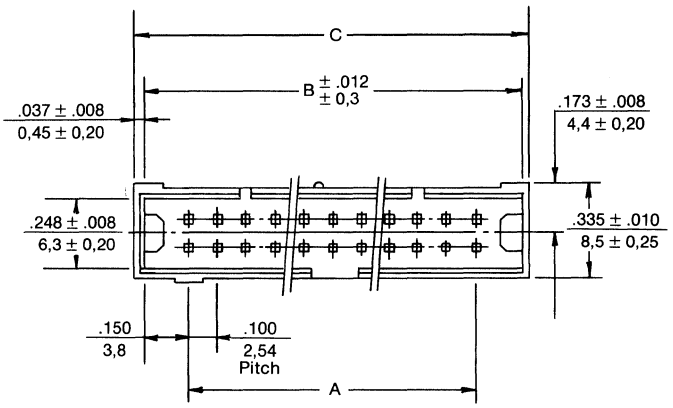
.050" (1,27 mm) Header

B

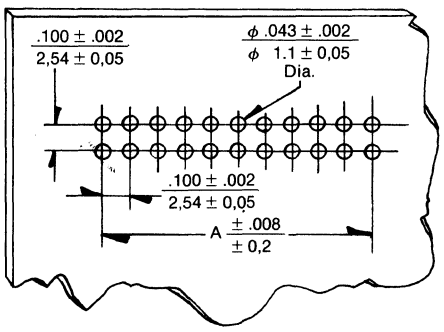
5332 Series
NGS1 / NGS2 / NGS3 / NT2
Single Polarization, Vertical

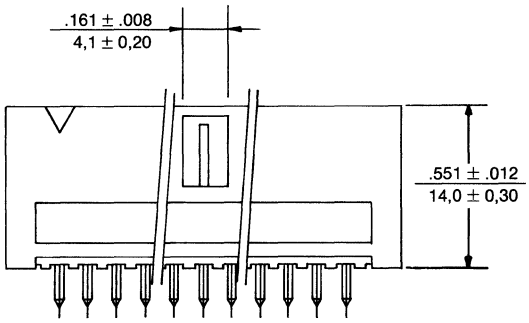


- 10-50 Circuits
- 94V-0 Glass filled polyester
- Color - black
- Mates with Molex 5320 series connector
- Fully shrouded
- Contact pin: .025" (0,635mm) square, brass
- Selective gold and tin plated versions



Recommended PCB Hole Pattern





Dimensions 5332 Series

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
10	.400 10,16	.700 17,76	.774 19,66	20	.900 22,86	1.200 30,46	1.274 32,36	30	1.400 35,56	1.700 43,16	1.774 45,06	40	1.900 48,26	2.200 55,86	2.274 57,76
14	.600 15,24	.900 22,84	.974 24,74	26	1.200 30,48	1.500 38,08	1.574 39,98	34	1.600 40,64	1.900 48,24	1.974 50,14	50	2.400 60,96	2.700 68,56	2.774 70,46
16	.700 17,78	1.000 25,38	1.074 27,28												

5332-NGS1 / -NGS2 / -NGS3 / -NT2
Ordering Information Replace **XX** in Order No. with number of circuits required.

PLATING SPECIFICATIONS:	NGS1	NGS2	NGS3	NT2
Order No.	39-26-7XX5	39-26-7XX6	39-26-7XX7	39-28-5XX1

Highlighted area denotes Molex European standard product, usually available within shorter leadtimes.

Plating Specifications

NGS1
39 microinches (1 micron) min. nickel underplate. Contact area: 4 microinches (0,1 micron) min. gold. Solder area: 3 microns min. tin.

NGS2
39 microinches (1 micron) min. nickel underplate. Contact area: 30 microinches (0,76 micron) min. gold. Solder area: 3 microns min. tin.

NGS3
39 microinches (1 micron) min. nickel underplate. Contact area: 10 microinches (0,25 micron) min. gold. Solder area: 3 microns min. tin.

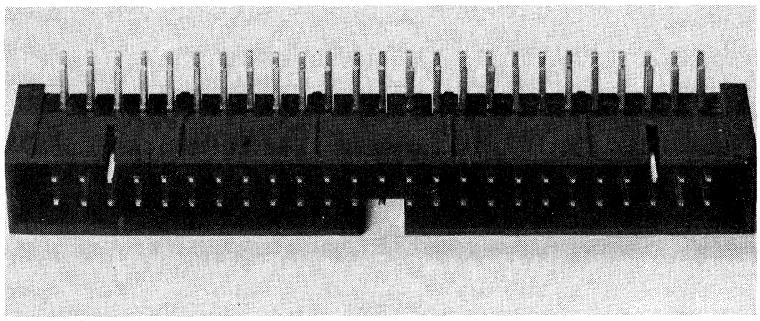
NT2
35 microinches (0.9 microns) min. tin overall, over nickel undeplate.

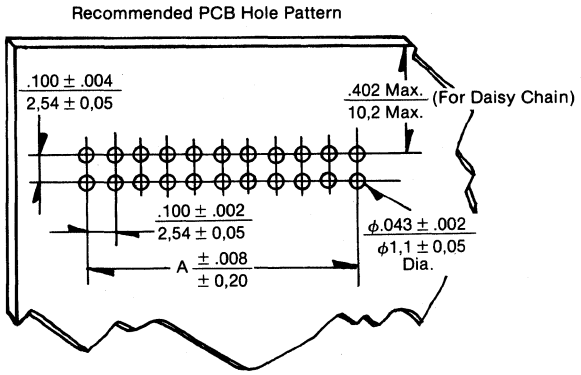
.050" (1,27 mm) Header

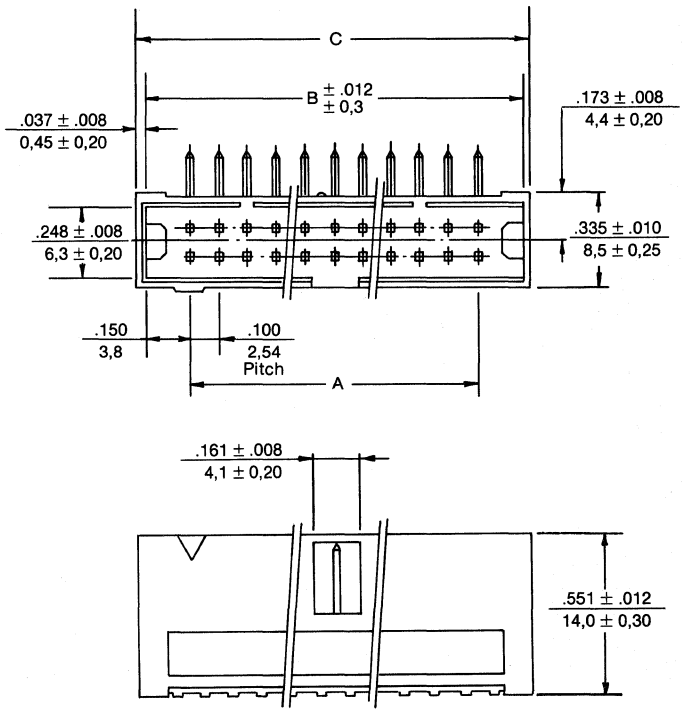
B

5342 Series
NGS1 / NGS 2/ NGS 3 / NT2
Single Polarization, Right Angle

- 10-50 Circuits
- 94V-0 Glass filled polyester
- Color - black
- Mates with Molex 5320 series connector
- Fully shrouded
- Contact pin: .025" (0,635mm) square, brass
- Selective gold, and tin plated versions







Dimensions 5342 Series

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
10	.400 10,16	.700 17,76	.774 19,66	20	.900 22,86	1.200 30,46	1.274 32,36	30	1.400 35,56	1.700 43,16	1.774 45,06	40	1.900 48,26	2.200 55,86	2.274 57,76
14	.600 15,24	.900 22,84	.974 24,74	26	1.200 30,48	1.500 38,08	1.574 39,98	34	1.600 40,64	1.900 48,24	1.974 50,14	50	2.400 60,96	2.700 68,56	2.774 70,46
16	.700 17,78	1.000 25,38	1.074 27,28												

5342-NGS1 / -NGS2 / -NGS3 / -NT2
Ordering Information Replace **XX** in Order No. with number of circuits required.

PLATING SPECIFICATIONS:	NGS1	NGS2	NGS3	NT2
Order No.	39-26-7XX8	39-26-7XX9	39-26-8XX0	39-28-5XX4

Highlighted area denotes Molex European standard product, usually available within shorter leadtimes.

Plating Specifications

NGS1
39 microinches (1 micron) min. nickel underplate. Contact area: 4 microinches (0,1 micron) min. gold. Solder area: 3 microns min. tin.

NGS2
39 microinches (1 micron) min. nickel underplate. Contact area: 30 microinches (0,76 micron) min. gold. Solder area: 3 microns min. tin.

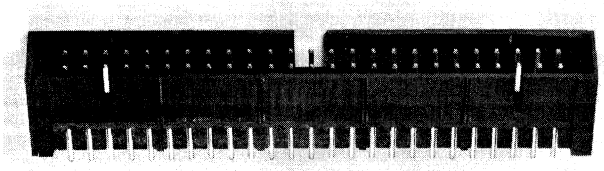
NGS3
39 microinches (1 micron) min. nickel underplate. Contact area: 10 microinches (0,25 micron) min. gold. Solder area: 3 microns min. tin.

NT2
35 microinches (0.9 microns) min. tin overall, over nickel underplate.

QF 50 Ribbon Cable Connector .050" (1,27mm)

B

90571 Series
Vertical Shrouded Header Non-Eject



- 10-50 Circuits
- Tin plated on solder tail
- Center Polarization
- Selective gold plating options for contacts
- 0.635 mm square pins
- Mates with 90573/90574/ 90635

Specifications

Housing: Glass filled polyester 94 V-0

Terminal: Copper alloy

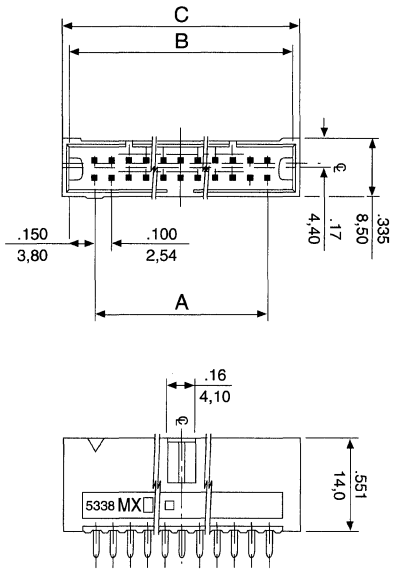
Voltage: 250

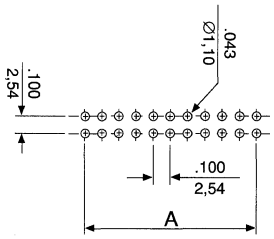
Current: 2.5 A

Insulation Resistance: 1000 megohm

Contact Resistance: 20 milliohm

Dielectric Strength: 600 VAC for one minute





PCB LAYOUT

Dimensions 90571 Series

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
10	.400 10,16	.700 17,76	.774 19,66	20	.900 22,86	1.200 30,46	1.274 32,36	34	1.600 40,64	1.900 48,24	1.974 50,14
14	.600 15,24	.900 22,84	.974 24,74	26	1.200 30,48	1.500 38,08	1.574 39,98	40	1.900 48,26	2.200 55,86	2.274 57,76
16	.700 17,78	1.000 25,38	1.074 27,28	30	1.400 35,56	1.700 43,16	1.774 45,06	50	2.400 60,96	2.700 68,56	2.774 70,46

Ordering Information Replace **XX** in Order No. with number of circuits required.

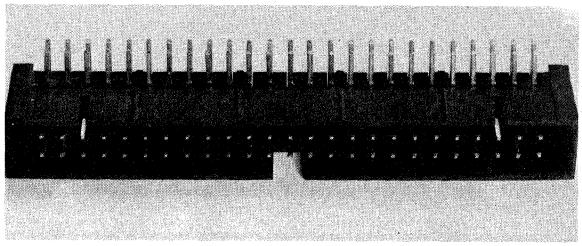
Plating Specification	Plating 1	Plating 2	Plating 3	Plating 4
Order No.	90571-2**XX**1	90571-2**XX**2	90571-2**XX**3	90571-2**XX**9*

Plating 1: 4 microinches gold in contact area, 118 microinches tin in solder area, 39 microinches nickel underplate
Plating 2: 30 microinches gold in contact area, 118 microinches tin in solder area, 39 microinches nickel underplate
Plating 3: 10 microinches gold in contact area, 118 microinches tin in solder area, 39 microinches nickel underplate
Plating 4: 40 microinches nickel under 39 microinches tin

QF 50 Ribbon Cable Connector .050" (1,27mm)

B

90572 Series
Right Angle Shrouded Header Non-Eject



- 10-50 Circuits
- Tin plated on solder tail
- Center Polarization
- Selective gold plating options for contacts
- 0.635 mm square pins
- Mates with 90573/90574/90635

Specifications

Housing: Glass filled polyester 94 V-0

Terminal: Copper alloy

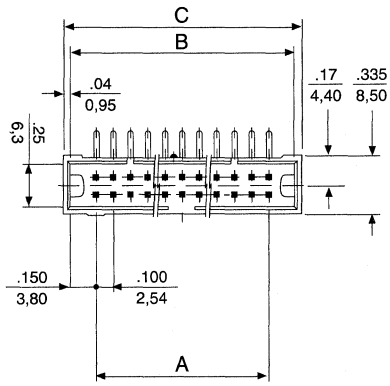
Voltage: 250

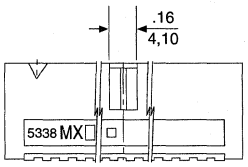
Current: 2.5 A

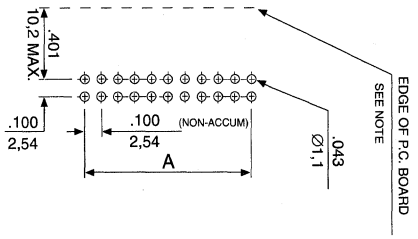
Insulation Resistance: 1000 megohm

Contact Resistance: 20 milliohm

Dielectric Strength: 600 VAC for one minute







P.C.B. LAYOUT

Note: 10,2mm max. to edge of PCB for daisy chain applications.

Dimensions 90572 Series

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
10	.400 10,16	.700 17,76	.774 19,66	20	.900 22,86	1.200 30,46	1.274 32,36	34	1.600 40,64	1.900 48,24	1.974 50,14
14	.600 15,24	.900 22,84	.974 24,74	26	1.200 30,48	1.500 38,08	1.574 39,98	40	1.900 48,26	2.200 55,86	2,274 57,76
16	.700 17,78	1.000 25,38	1.074 27,28	30	1.400 35,56	1.700 43,16	1.774 45,06	50	2.400 60,96	2.700 68,56	2.774 70,46

Ordering Information Replace **XX** in Order No. with number of circuits required.

Plating Specification	Plating 1	Plating 2	Plating 3	Plating 4
Order No.	90572-2**XX**1	90572-2**XX**2	90572-2**XX**3	90572-2**XX**9

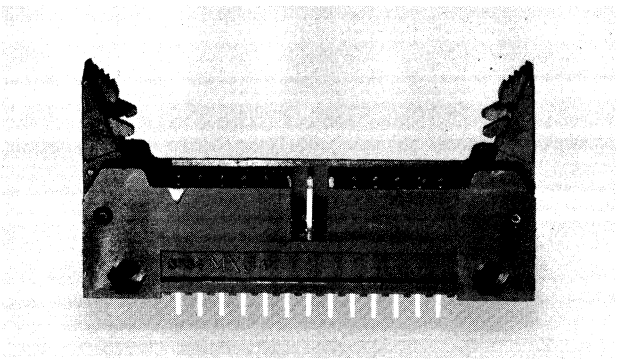
Plating 1: 4 microinches gold in contact area, 118 microinches tin in solder area, 39 microinches nickel underplate
Plating 2: 30 microinches gold in contact area, 118 microinches tin in solder area, 39 microinches nickel underplate
Plating 3: 10 microinches gold in contact area, 118 microinches tin in solder area, 39 microinches nickel underplate
Plating 4: 40 microinches nickel under 39 microinches tin

.050" (1,27 mm) Header, DIN 41651-Adapted

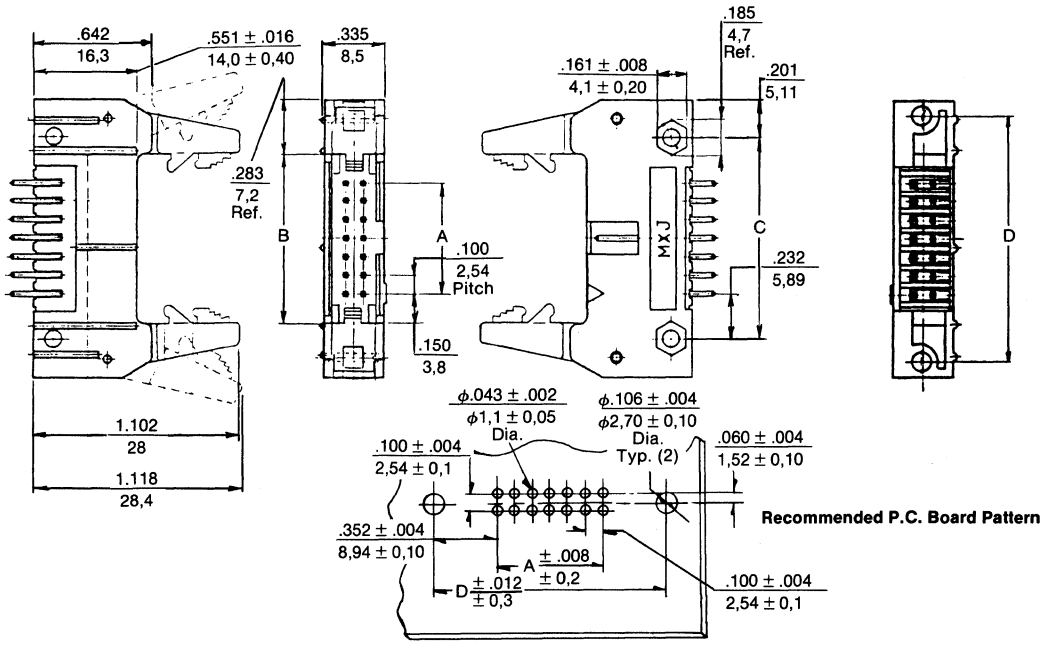
Preferred Version In Europe

B

5576 Series
NBGS1 / NBGS2 / NBT2
Vertical with Dual Function Latch/Eject Levers



- 10-60 Circuits
- Polarized
- 94V-0 Glass filled polyester, black
- Fully shrouded
- Mates with Molex 5320 series connector and also is industry compatible
- Contact pin: .025" (0,635mm) square, brass
- Lever spring pin - stainless steel
- Two selective gold, and overall tin plated versions



Dimensions 5576 Series

Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E
10	.400 10,16	.700 17,76	.864 21,94	1.104 28,04	1.266 32,16	26	1.200 30,48	1.500 38,08	1.664 42,26	1.904 48,36	2.066 52,48	40	1.900 48,26	2.200 55,86	2.364 60,04	2.604 66,14	2.766 70,26
14	.600 15,24	.900 22,84	1.064 27,02	1.304 33,12	1.466 37,24	30	1.400 35,56	1.700 43,16	1.864 47,34	2.104 53,44	2.266 57,56	50	2.400 60,96	2.700 68,56	2.864 72,74	3.104 78,84	3.266 82,96
16	.700 17,78	1.000 25,38	1.164 29,56	1.404 35,66	1.566 39,78	34	1.600 40,64	1.900 48,24	2.064 52,42	2.304 58,52	2.466 62,64	60	2.900 73,66	3.200 81,26	3.364 85,44	3.604 91,54	3.766 95,66
20	.900 22,86	1.200 30,46	1.364 34,64	1.604 40,74	1.766 44,86												

5576-NBGS1 / -NBGS2 / -NBT2
Ordering Information Replace **XX** in Order No. with number of circuits required.

PLATING SPECIFICATIONS:	NBGS1	NBGS2	NBT2
Order No.	39-27-1XX3	39-27-1XX4	39-28-5XX5

Plating Specifications

Highlighted area denotes Molex European standard product, usually available within shorter leadtimes.

Plating Specifications

NBGS1
39 microinches (1 micron) min. nickel underplate. Contact area: 4 microinches (0,1 micron) min. gold. Solder area: 3 microns min. tin.

NBGS2
39 microinches (1 micron) min. nickel underplate. Contact area: 30 microinches (0,76 micron) min. gold. Solder area: 3 microns min. tin.

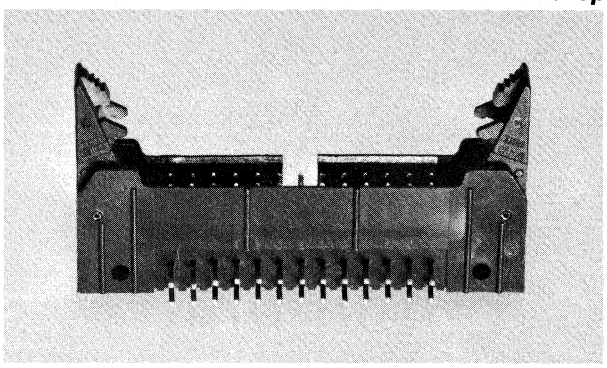
NBT2
35 microinches (.9 micron) min. tin overall, over nickel underplate.

.050" (1,27 mm) Header, DIN 41651-Adapted

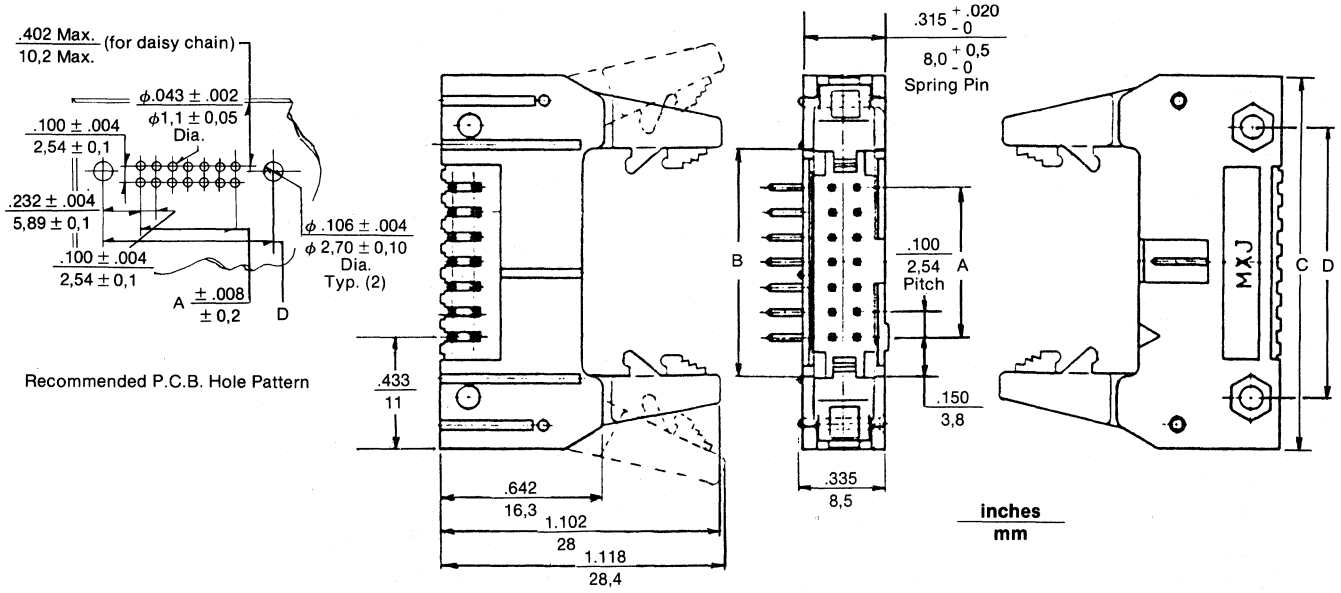
B

5578 Series
NBGS1 / NBGS2 / NBT2
Right Angle with Dual Function Eject Levers

Preferred Version in Europe



- 10-60 Circuits
- Polarized
- 94V-0 Glass filled polyester, black
- Fully shrouded
- Mates with Molex 5320 series and also is industry compatible
- Contact pin: .025" (0,635mm) square, brass
- Lever spring pin - stainless steel
- Two selective gold, and overall tin plated versions



Dimensions 5578 Series

Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Circuits	Dim. A	Dim. B	Dim. C	Dim. D
10	.400 10,16	.700 17,76	1.266 32,16	.864 21,94	26	1.200 30,48	1.500 38,08	2.066 52,48	1.664 42,26	40	1.900 48,26	2.200 55,86	2.766 70,26	2.364 60,04
14	.600 15,24	.900 22,84	1.466 37,24	1.064 27,02	30	1.400 35,56	1.700 43,16	2.266 57,56	1.864 47,34	50	2.400 60,96	2.700 68,56	3.266 82,96	2.864 72,74
16	.700 17,78	1.000 25,38	1.566 39,78	1.164 29,56	34	1.600 40,64	1.900 48,24	2.466 62,64	2.064 52,42	60	2.900 73,66	3.200 81,26	3.766 95,66	3.364 85,44
20	.900 22,86	1.200 30,46	1.766 44,86	1.364 34,64										

5578-NGBS1 / -NBGS2 / NBT2
Ordering Information Replace **XX** in Order No. with number of circuits required.

PLATING SPECIFICATIONS:	NBGS1	NBGS2	NBT2
Order No.	39-27-1**XX**6	39-27-1**XX**7	39-28-5**XX**6

Highlighted area denotes Molex European standard product, usually available within shorter leadtimes.

Plating Specification

NBGS1
39 microinches (1 micron) min. nickel underplate. Contact area: 4 microinches (0,1 micron) min. gold. Solder area: 3 microns min. tin.

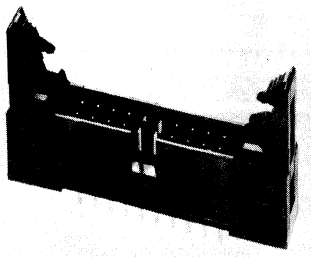
NBGS2
39 microinches (1 micron) min. nickel underplate. Contact area: 30 microinches (0,76 micron) min. gold. Solder area: 3 microns min. tin.

NBT2
35 microinches (.9 micron) min. tin overall, over nickel underplate.

QF 50 Ribbon Cable Connector .050" (1,27mm)

B

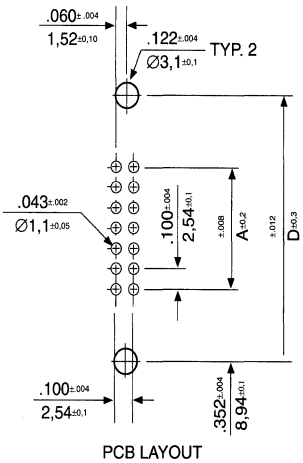
90663 Series
Vertical with Latch/Eject Lever MIL Keying

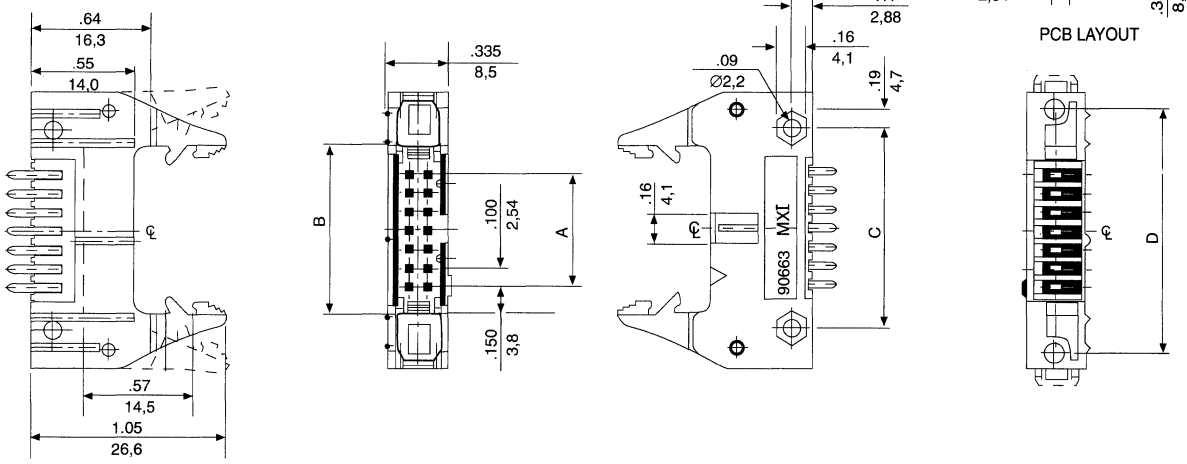


- 10-64 Circuits
- Tin Plated on solder tail
- Complies with industry standard DIN 41651
- Molded-in MIL keying

Specifications

Housing: Glass filled polyester 94 V-0
Terminal: Copper alloy
Voltage: 250
Current: 2.5 A
Insulation Resistance: 1000 megohm
Contact Resistance: 20 milliohm
Dielectric Strength: 600 VAC for one minute





Dimensions 90663 Series

Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Circuits	Dim. A	Dim. B	Dim. C	Dim. D
10	.400 10,16	.700 17,76	.864 21,94	1.104 28,04	34	1.600 40,64	1.900 48,24	2.064 52,42	1.304 58,52
14	.600 15,24	.900 22,84	1.064 27,02	1.304 33,12	40	1.900 48,26	2.200 55,86	2.364 60,04	2.604 66,14
16	.700 17,78	1.000 25,38	1.164 29,56	1.404 35,66	50	2.400 60,96	2.700 68,56	2.864 72,74	3.104 78,84
20	.900 22,86	1.200 30,46	1.364 34,64	1.604 40,74	60	2.900 73,66	3.200 81,26	3.364 85,44	3.604 91,54
26	1.200 30,48	1.500 38,08	1.664 42,26	1.904 48,36	64	3.100 78,74	3.400 86,34	3.564 90,52	3.804 96,62
30	1.400 35,56	1.700 43,16	1.864 47,34	2.104 53,44					

Ordering Information Replace **XX** in Order No. with number of circuits required.

Plating Specification	Plating 1	Plating 2	Plating 3	Plating 4
Order No.	90663-1**XX**1	90663-1**XX**2	90663-1**XX**3	90663-1**XX**9

Plating 1: 4 microinches gold in contact area, 118 microinches tin in solder area, 39 microinches nickel underplate
Plating 2: 30 microinches gold in contact area, 118 microinches tin in solder area, 39 microinches nickel underplate
Plating 3: 10 microinches gold in contact area, 118 microinches tin in solder area, 39 microinches nickel underplate
Plating 4: 40 microinches nickel under 39 microinches tin

QF 50 Ribbon Cable Connector .050" (1,27mm)

B

90663 Series
Right Angle with Latch/Eject Lever MIL Keying

- 10-64 Circuits
- Tin plated on solder tail
- Complies with industry standard DIN 41651
- Molded-in MIL keying

Specifications

Housing: Glass filled polyester 94 V-0

Terminal: Copper alloy

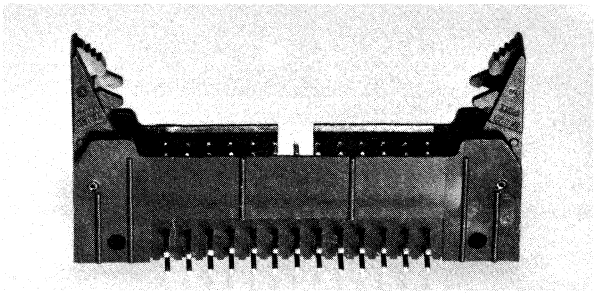
Voltage: 250

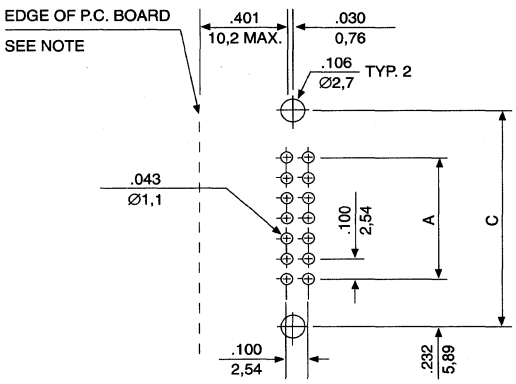
Current: 2.5 A

Insulation Resistance: 1000 megohm

Contact Resistance: 20 milliohm

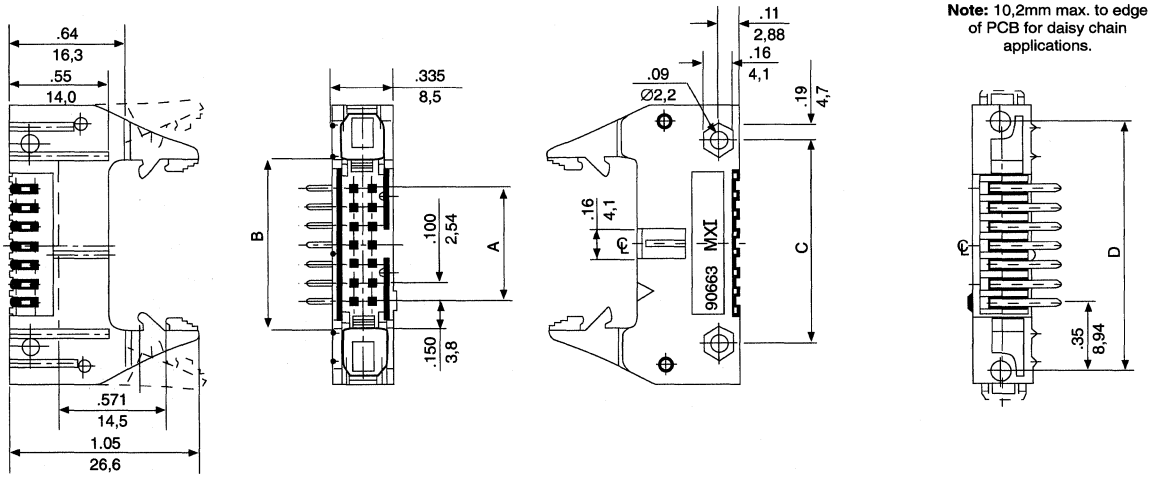
Dielectric Strength: 600 VAC for one minute





PCB LAYOUT

Note: 10,2mm max. to edge of PCB for daisy chain applications.



Dimensions 90663 Series

Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Circuits	Dim. A	Dim. B	Dim. C	Dim. D
10	.400 10,16	.700 17,76	.864 21,94	1.104 28,04	34	1.600 40,64	1.900 48,24	2.064 52,42	1.304 58,52
14	.600 15,24	.900 22,84	1.064 27,02	1.304 33,12	40	1.900 48,26	2.200 55,86	2.364 60,04	2.604 66,14
16	.700 17,78	1.000 25,38	1.164 29,56	1.404 35,66	50	2.400 60,96	2.700 68,56	2.864 72,74	3.104 78,84
20	.900 22,86	1.200 30,46	1.364 34,64	1.604 40,74	60	2.900 73,66	3.200 81,26	3.364 85,44	3.604 91,54
26	1.200 30,48	1.500 38,08	1.664 42,26	1.904 48,36	64	3.100 78,74	3.400 86,34	3.564 90,52	3.804 96,62
30	1.400 35,56	1.700 43,16	1.864 47,34	2.104 53,44					

Ordering Information Replace **XX** in Order No. with number of circuits required.

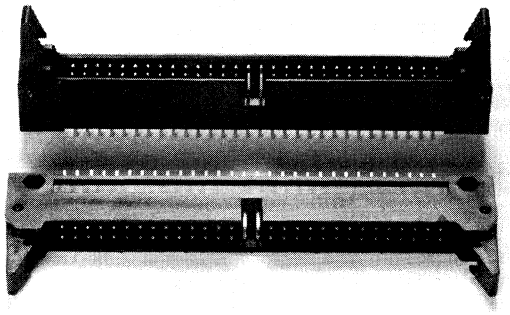
Plating Specification	Plating 1	Plating 2	Plating 3	Plating 4
Order No.	90663-2**XX**1	90663-2**XX**2	90663-2**XX**3	90663-2**XX**9

Plating 1: 4 microinches gold in contact area, 118 microinches tin in solder area, 39 microinches nickel underplate
Plating 2: 30 microinches gold in contact area, 118 microinches tin in solder area, 39 microinches nickel underplate
Plating 3: 10 microinches gold in contact area, 118 microinches tin in solder area, 39 microinches nickel underplate
Plating 4: 40 microinches nickel under 39 microinches tin

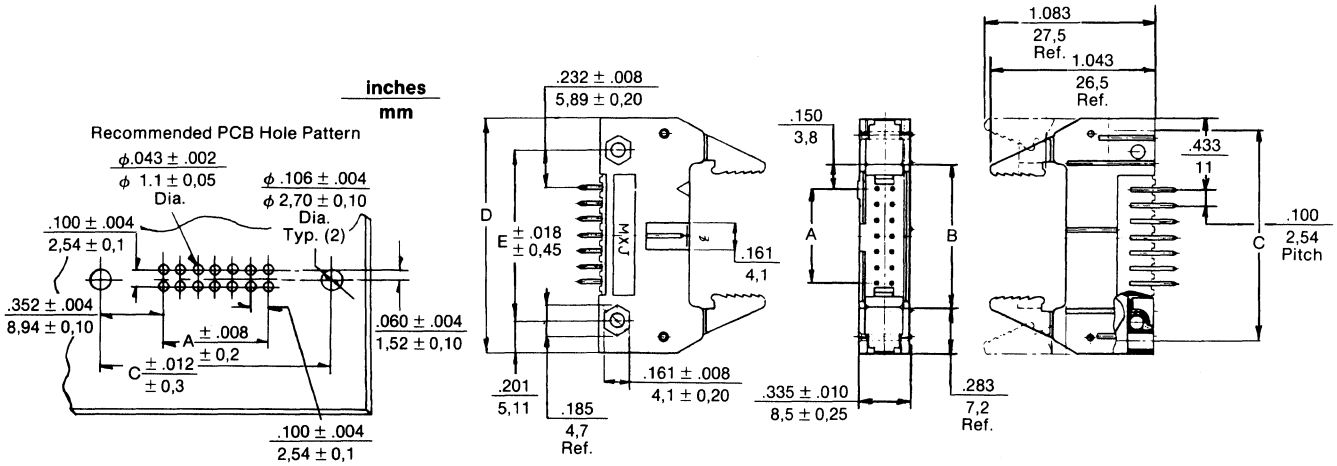
.050" (1,27 mm) Header

B

5330 Series
NBGS1 / NBGS2 / NBT2
Vertical with Latch/Eject Lever



- 10-60 Circuits
- Polarized
- 94V-0 Glass filled polyester, black
- Fully shrouded
- Stackable side by side
- Latches connector with or without strain relief
- Mates with Molex 5320 series connector
- Contact pin: .025" (0,635mm) square, brass
- Two selective gold, and overall tin plated versions
- Lever spring pins - stainless steel



Dimensions 5330 Series

Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E
10	.400 10,16	.700 17,76	1.104 28,04	1.266 32,16	.864 21,94	26	1.200 30,48	1.500 38,08	1.904 48,36	2.066 52,48	1.664 42,26	40	1.900 48,26	2.200 55,86	2.604 66,14	2.766 70,26	2.364 60,04
14	.600 15,24	.900 22,84	1.304 33,12	1.466 37,24	1.064 27,02	30	1.400 35,56	1.700 43,16	2.104 53,44	2.266 57,56	1.864 47,34	50	2.400 60,96	2.700 68,56	3.104 78,84	3.266 82,96	2.864 72,74
16	.700 17,78	1.000 25,38	1.404 35,66	1.566 39,78	1.164 29,56	34	1.600 40,64	1.900 48,24	2.304 58,52	2.466 62,64	2.064 52,42	60	2.900 73,66	3.200 81,26	3.604 91,54	3.766 95,66	3.364 85,44
20	.900 22,86	1.200 30,46	1.604 40,74	1.766 44,86	1.364 34,64												

5330-NBGS1 / -NBGS2 / -NBT2 (with Latch/Eject Lever)

Ordering Information Replace **XX** in Order No. with number of circuits required.

PLATING SPECIFICATIONS	NBGS1	NBGS2	NBT2
Order No.	39-26-6**XX**6	39-26-6**XX**7	39-28-5**XX**0

Also Available:

5330-NAGS1 / -NAGS2 / -NAT2 Series
(with Straight Pin - No Latch/Eject Lever)

Ordering Information Replace **XX** in Order No. with number of circuits required.

PLATING SPECIFICATIONS	NAGS1	NAGS2	NAT2
Order No.	39-26-6**XX**3	39-26-6**XX**4	39-28-4**XX**9

Highlighted area denotes Molex European standard product, usually available within shorter leadtimes.

Plating Specifications

NBGS1 (with latch/eject levers)
NAGS1 (without latch/eject levers)
39 microinches (1 micron) min. nickel underplate. Contact Area: 4 microinches (0,1 micron) min. gold. Solder Area: 3 microns min. tin.

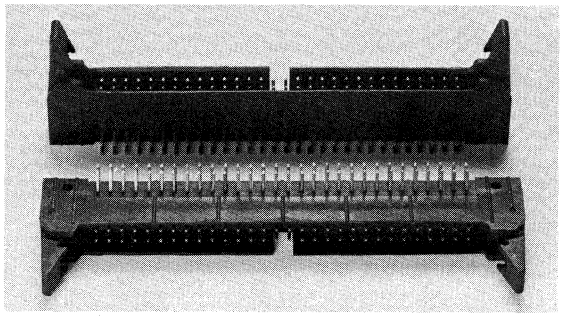
NBGS2 (with latch/eject levers)
NAGS2 (without latch/eject levers)
39 microinches (1 micron) min. nickel underplate. Contact Area: 30 microinches (0,76 microns) min. gold. Solder Area: 3 microns min. tin.

NBT2 (with latch/eject levers)
NAT2 (without latch/eject levers)
35 microinches (.9 microns) min. tin overall, over nickel underplate.

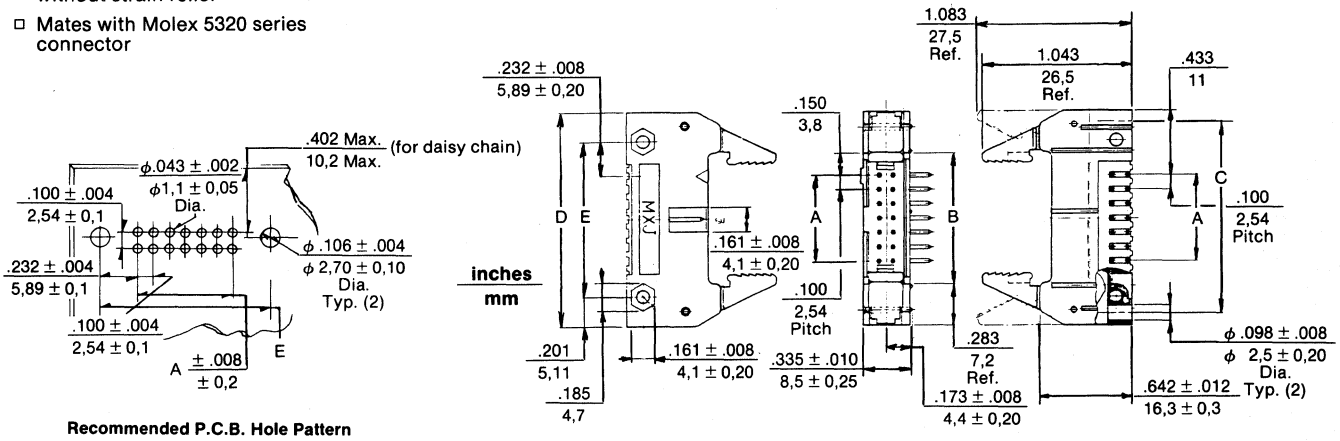
.050" (1,27 mm) Header

B

5340 Series
NBGS1 / NBGS2 / NBT2
Right Angle with Latch/Eject Lever



- 10-60 Circuits
- Polarized
- 94V-0 Glass filled polyester
- Color - black
- Fully shrouded
- Stackable side by side
- Latches connector with or without strain relief
- Mates with Molex 5320 series connector
- Contact pin: .025" (0,635mm) square, brass
- Two selective gold, and overall tin plated versions
- Lever spring pins - stainless steel
- Machine screw M2X (10 mm) and hexagon nut M2 used for mounting



Dimensions 5340 Series

Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E
10	.400 10,16	.700 17,76	1.104 28,04	1.266 32,16	.864 21,94	26	1.200 30,48	1.500 38,08	1.904 48,36	2.066 52,48	1.664 42,26	40	1.900 48,26	2.200 55,86	2.604 66,14	2.766 70,26	2.364 60,04
14	.600 15,24	.900 22,84	1.304 33,12	1.466 37,24	1.064 27,02	30	1.400 35,56	1.700 43,16	2.104 53,44	2.266 57,56	1.864 47,34	50	2.400 60,96	2.700 68,56	3.104 78,84	3.266 82,96	2.864 72,74
16	.700 17,78	1.000 25,38	1.404 35,66	1.566 39,78	1.164 29,56	34	1.600 40,64	1.900 48,24	2.304 58,52	2.466 62,64	2.064 52,42	60	2.900 73,66	3.200 81,26	3.604 91,54	3.766 95,66	3.364 85,44
20	.900 22,86	1.200 30,46	1.604 40,74	1.766 44,86	1.364 34,64												

5340-NBGS1 / -NBGS2 / -NBT2 (with Latch/Eject Levers)

Ordering Information Replace **XX** in Order No. with number of circuits required.

PLATING SPECIFICATIONS:	NBGS1	NBGS2	NBT2
Order No.	39-26-7**XX**2	39-26-7**XX**3	39-28-5**XX**3

Also Available:

5340-NAGS1 / -NAGS2 / -NAT2
(with Right Angle Pins - No Latch/Eject Lever)

Ordering Information Replace **XX** in Order No. with number of circuits required.

PLATING SPECIFICATIONS:	NAGS1	NAGS2	NAT2
Order No.	39-26-6**XX**9	39-26-7**XX**0	39-28-5**XX**2

Highlighted area denotes Molex European standard product, usually available within shorter leadtimes.

Plating Specifications

NBGS1 (with latch/eject levers)
NAGS1 (without latch/eject levers)
39 microinches (1 micron) min. nickel underplate. Contact Area: 4 microinches (0,1 micron) min. gold. Solder Area: 3 microns min. tin.

NBGS2 (with latch/eject levers)
NAGS2 (without latch/eject levers)
39 microinches (1 micron) min. nickel underplate. Contact Area: 30 microinches (0,76 microns) min. gold. Solder Area: 3 microns min. tin.

NBT2 (with latch/eject levers)
NAT2 (without latch/eject levers)
35 microinches (.9 micron) min. tin overall, over nickel underplate.

QF 50 Ribbon Cable Connector .050" (1,27mm)

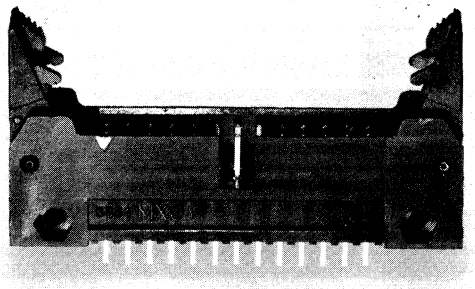
B

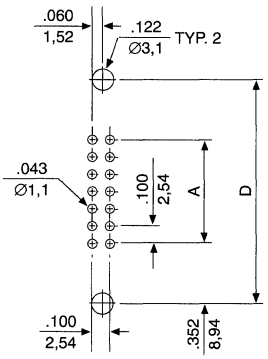
90571 Series
Vertical with Latch Eject Levers

- 10-50 Circuits
- Tin plated on solder tail
- Center Polarization
- Selective gold plating options for contacts
- 0.635 mm square pins
- Mates with 90573/90574/90635

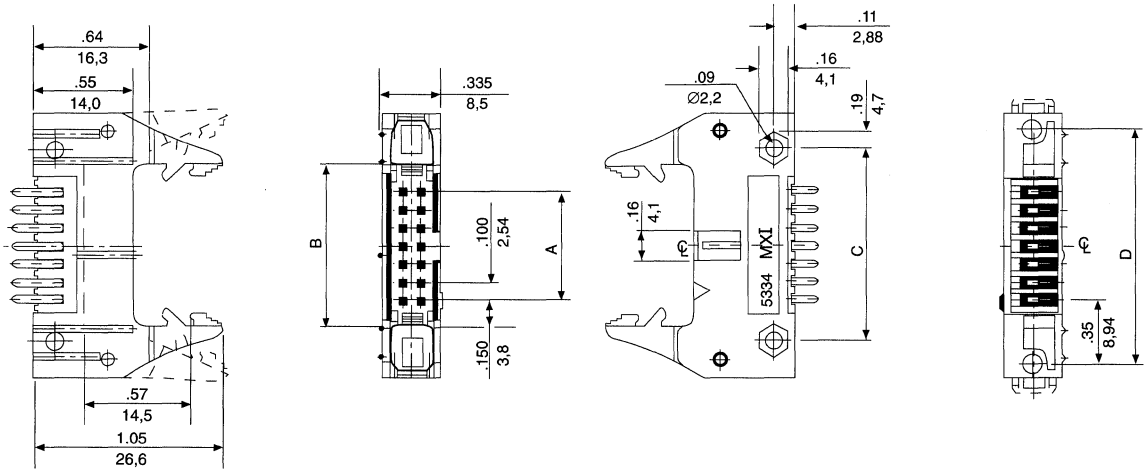
Specifications

Housing: Glass filled polyester 94 V-0
Terminal: Copper alloy
Voltage: 250
Current: 2.5 A
Insulation Resistance: 1000 megohm
Contact Resistance: 20 milliohm
Dielectric Strength: 600 VAC for one minute





PCB LAYOUT



Dimensions 90571 Series

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
10	.400 10,16	.700 17,76	.774 19,66	20	.900 22,86	1.200 30,46	1.274 32,36	34	1.600 40,64	1.900 48,24	1.974 50,14
14	.600 15,24	.900 22,84	.974 24,74	26	1.200 30,48	1.500 38,08	1.574 39,98	40	1.900 48,26	2.200 55,86	2.274 57,76
16	.700 17,78	1.000 25,38	1.074 27,28	30	1.400 35,56	1.700 43,16	1.774 45,06	50	2.400 60,96	2.700 68,56	2.774 70,46

Ordering Information Replace **XX** in Order No. with number of circuits required.

Plating Specification	Plating 1	Plating 2	Plating 3	Plating 4
Order No.	90571-1**XX**1	90571-1**XX**2	90571-1**XX**3	90571-1**XX**9

Plating 1: 4 microinches gold in contact area, 118 microinches tin in solder area, 39 microinches nickel underplate
Plating 2: 30 microinches gold in contact area, 118 microinches tin in solder area, 39 microinches nickel underplate
Plating 3: 10 microinches gold in contact area, 118 microinches tin in solder area, 39 microinches nickel underplate
Plating 4: 40 microinches nickel under 39 microinches tin

QF 50 Ribbon Cable Connector .050" (1,27mm)

B

90572 Series
Right Angle with Latch Eject Levers

- 10-50 Circuits
- Tin plated on solder tail
- Center Polarization
- Selective gold plating options for contacts
- 0.635 mm square pins
- Mates with 90573/90574/90635

Specifications

Housing: Glass filled polyester 94 V-0

Terminal: Copper alloy

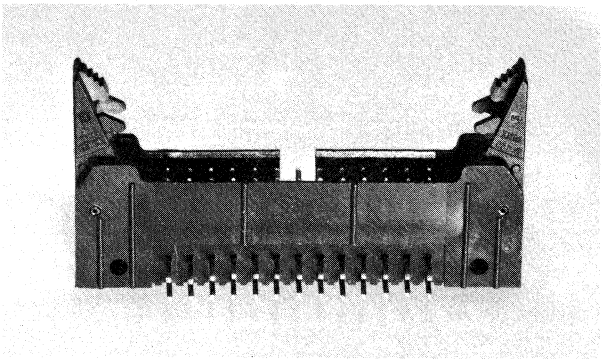
Voltage: 250

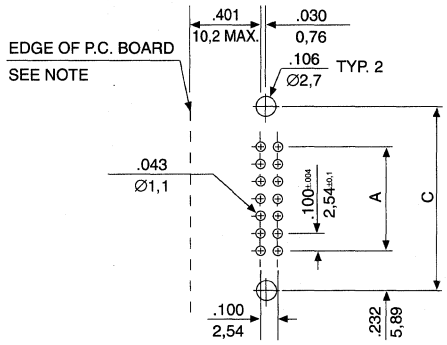
Current: 1 A

Insulation Resistance: 1000 megohm

Contact Resistance: 20 milliohm

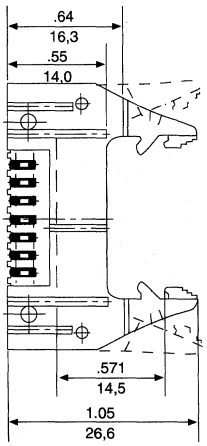
Dielectric Strength: 500 VAC for one minute

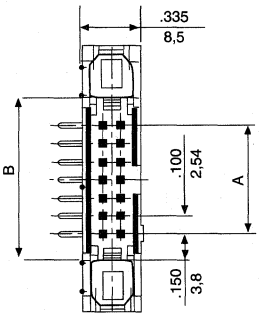


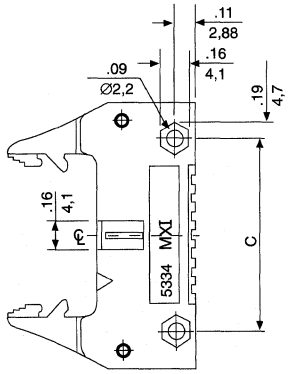


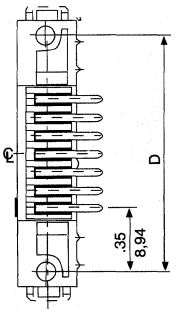
PCB LAYOUT

Note: 10,2mm max. to edge of PCB for daisy chain applications.









Dimensions 90572 Series

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
10	.400 10,16	.700 17,76	.774 19,66	20	.900 22,86	1.200 30,46	1.274 32,36	34	1.600 40,64	1.900 48,24	1.974 50,14
14	.600 15,24	.900 22,84	.974 24,74	26	1.200 30,48	1.500 38,08	1.574 39,98	40	1.900 48,26	2.200 55,86	2.274 57,76
16	.700 17,78	1.000 25,38	1.074 27,28	30	1.400 35,56	1.700 43,16	1.774 45,06	50	2.400 60,96	2.700 68,56	2.774 70,46

Ordering Information Replace **XX** in Order No. with number of circuits required.

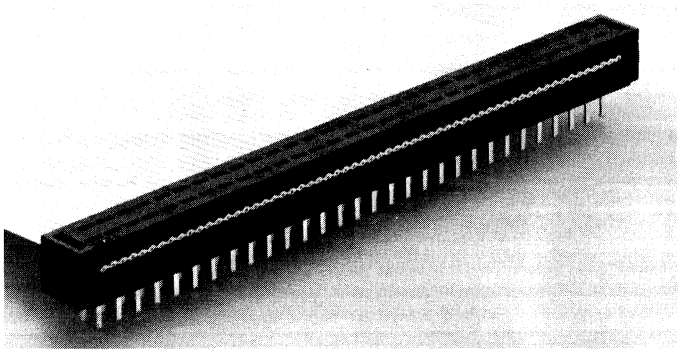
Plating Specification	Plating 1	Plating 2	Plating 3	Plating 4
Order No.	90572-1**XX**1	90572-1**XX**2	90572-1**XX**3	90572-1**XX**9

Plating 1: 4 microinches gold in contact area, 118 microinches tin in solder area, 39 microinches nickel underplate
Plating 2: 30 microinches gold in contact area, 118 microinches tin in solder area, 39 microinches nickel underplate
Plating 3: 10 microinches gold in contact area, 118 microinches tin in solder area, 39 microinches nickel underplate
Plating 4: 40 microinches nickel under 39 microinches tin

Transition Connector S.H.E. Type

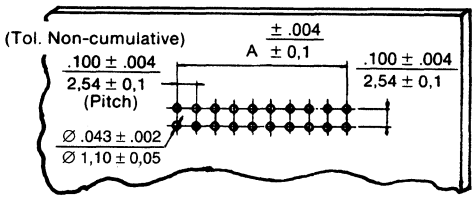
B

5360 Grid Series
.100" x .100" (2,54mm x 2,54mm)



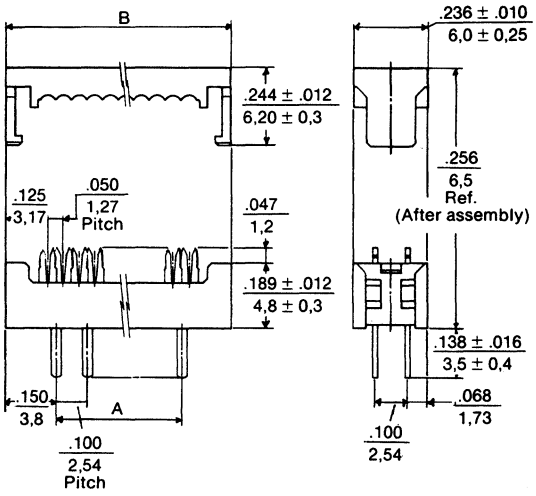
- Shrouded Header Eliminator
- 10-60 Circuits
- .236" (6,0mm) wide; uses minimal board space
- 94V-0 Polyester
- Color - black
- Symmetrical upper housing
- U-contact terminal design
- Contact material: phosphor bronze
- Plating - tin
- Cable accommodation: Stranded wire: AWG 28
- Insulation range ϕ .045" (1,14mm) max.
- Housings available with covers pre-assembled or loose
- Rated 1 amp
- Available in tubes for use on AM60556 machine; also available on tape for use on AM63200 machine

See Section M, this catalog, for application tooling.



Recommended P.C. Board Hole Dim.

(Unloaded Version Shown)



inches
mm

Dimensions 5360 Series — Tray Packaged

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
10	.400 10,16	.699 17,76	20	.900 22,86	1.199 30,46	34	1.600 40,64	1.899 48,24	50	2.400 60,96	2.699 68,56
14	.600 15,24	.899 22,84	26	1.200 30,48	1.499 38,08	40	1.900 48,26	2.199 55,86	60	2.900 73,66	3.199 81,26
16	.700 17,78	.999 25,38	30	1.399 35,56	1.699 43,16						

Ordering Information 5360 Series

Circuit sizes available: 10, 14, 16, 20, 26, 30, 34, 40, 50 and 60. Replace "**XX**" in Order No. with number of circuits desired.

Unloaded - Cover and housing separate	Preloaded - Cover and housing pre-assembled
• **Order No.** 15-38-0**XX**3	• **Order No.** 15-38-0**XX**4

• U.S. Standard Product, available through Molex franchised distributors.

Recommended Molex Ribbon Cable for use with 5360 Series: Eng. Nos. 6800, 40158

Picoflex™ PF-50 .050" (1,27 mm) Ribbon Cable Connector System

B

90327 Series IDT Connector

- Low profile
- One-piece housing assures precise positioning of cable
- Molded-in polarization
- Four points of contact with ribbon cable
- Pre-loaded contacts
- Accepts 28 AWG or 26 AWG (7 strand) ribbon cable
- Tape option for high speed termination

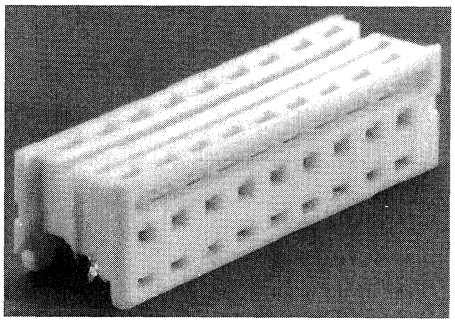
Specifications

Materials:
Housing - 94V-O white polyester

Contact - .079" 2µm tin plated or .030" .76µm select gold plated phosphor bronze

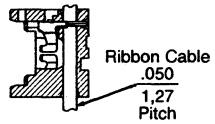
Electrical:
Voltage - 250V ac/dc max.

Current - 1.2 amp at 70°C

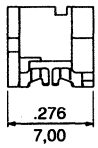


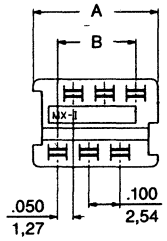
Dimensions and Ordering Information

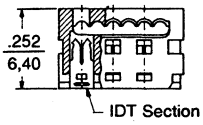
Plating	Order No.	Ckt. Size	Dim. A	Dim. B
Tin	90327-0304	4	.299	.150
Gold	90327-3304		7,59	3,81
Tin	90327-0306	6	.399	.250
Gold	90327-3306		10,13	6,35
Tin	90327-0308	8	.499	.350
Gold	90327-3308		12,67	8,89
Tin	90327-0310	10	.599	.450
Gold	90327-3310		15,21	11,43
Tin	90327-0312	12	.699	.550
Gold	90327-3312		17,75	13,97
Tin	90327-0314	14	.799	.650
Gold	90327-3314		20,29	16,51
Tin	90327-0316	16	.899	.750
Gold	90327-3316		22,83	19,05
Tin	90327-0318	18	.999	.850
Gold	90327-3318		25,37	21,59
Tin	90327-0320	20	1.099	.950
Gold	90327-3320		27,91	24,13



Section Showing Assy. After Termination







APPLICATION TOOLING	
Description	Order No.
Hand Tool	69008-0700
Pneumatic Press	69127-1001
Tape Pneumatic Press	69127-10X4
Semi-Automatic Press (PDT)	69127-9XXX
Fully Automatic Harness Machine	69009-93XX



Recommended Molex Ribbon Cable: 6800, 8863 and 40158 Series

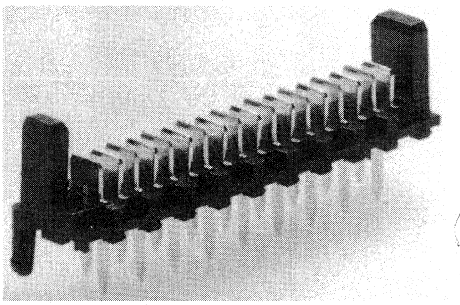
90325 Series Header

- Polarizing end walls and pegs
- Stamped contacts with in-line, flat blades
- Two points of contact with female terminal
- Rigid, staggered solder tails
- Friction lock

Specifications

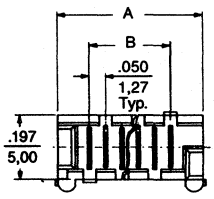
Materials:
Housing - 94V-O black polyester

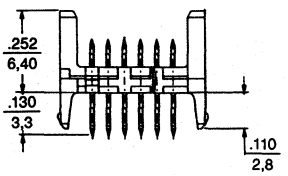
Contact - .079" 2µm tin plated or .030" .76µm select gold plated brass

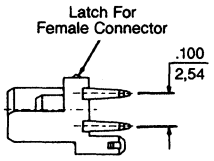


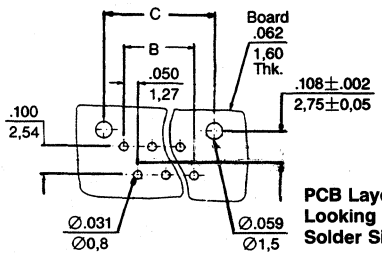
Dimensions and Ordering Information

Plating	Order No.	Ckt. Size	Dim. A	Dim. B	Dim. C
Tin	90325-0004	4	.349	.150	.292
Gold	90325-3004		8,86	3,81	7,41
Tin	90325-0006	6	.449	.250	.392
Gold	90325-3006		11,40	6,35	9,95
Tin	90325-0008	8	.549	.350	.492
Gold	90325-3008		13,94	8,89	12,49
Tin	90325-0010	10	.649	.450	.592
Gold	90325-3010		16,48	11,43	15,03
Tin	90325-0012	12	.749	.550	.692
Gold	90325-3012		19,02	13,97	17,57
Tin	90325-0014	14	.849	.650	.792
Gold	90325-3014		21,56	16,51	20,11
Tin	90325-0016	16	.949	.750	.892
Gold	90325-3016		24,10	19,05	22,65
Tin	90325-0018	18	1.049	.850	.992
Gold	90325-3018		26,64	21,59	25,19
Tin	90325-0020	20	1.149	.950	1,092
Gold	90325-3020		29,18	24,13	27,73







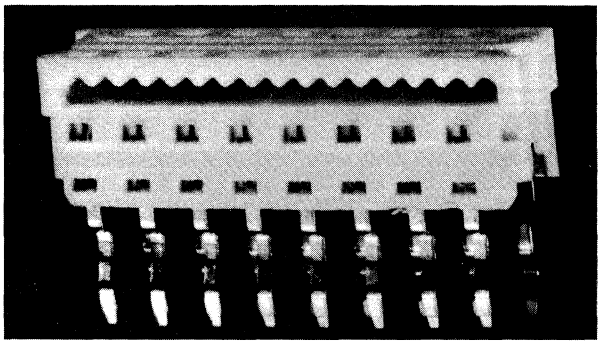


PCB Layout Looking From Solder Side

Picoflex™ PF-50 .050" (1,27mm) Ribbon Cable Connector System

B

90584 Series
IDT Connector



- For permanent board connections
- Kinked solder tails for board retention during solder process
- Fits same board layout pattern as male header
- Height from board when soldered & terminated only 6.40mm (.252")
- 2 points of contact in IDT section
- Optional tube packaging

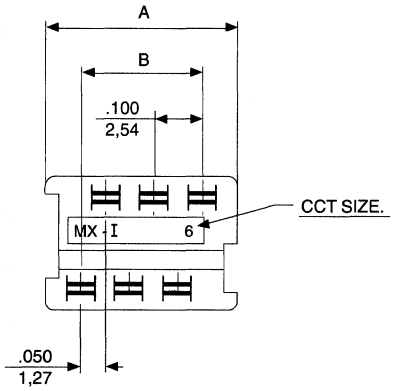
Specifications

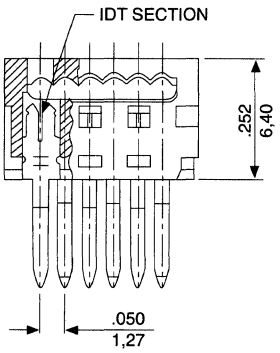
Materials:

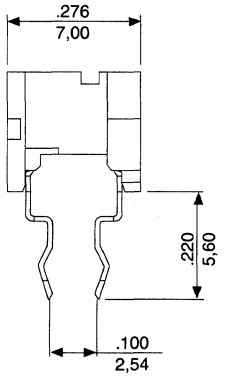
Housing - 94V-0 White Polyester

Contact - Tin/lead over nickel

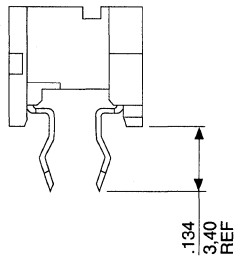
Application Tooling	
Description	**Order No.**
Hand Tool	69008-0910
Pneumatic Press	69127-1010
Semi-Automatic Press (PDT)	69127-9XXX



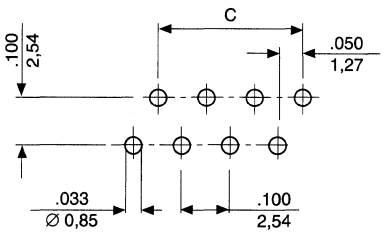




BEFORE TERMINATION



AFTER TERMINATION



P.C.B. LAYOUT

Dimensions and Ordering Information 90584 Series

Order No.	Circuit Size	Dim. A	Dim. B	Dim. C	Order No.	Circuit Size	Dim. A	Dim. B	Dim. C
90584-0304	4	.299 7,59	.150 3,81	.100 2,54	90584-0314	14	.799 20,29	.650 16,51	.600 15,24
90584-0306	6	.399 10,13	.250 6,35	.200 5,08	90584-0316	16	.899 22,83	.750 19,05	.700 17,78
90584-0308	8	.499 12,67	.350 8,89	.300 7,62	90584-0318	18	.999 25,37	.850 21,59	.800 20,32
90584-0310	10	.599 15,21	.450 11,43	.400 10,16	90584-0320	20	1.099 27,91	.950 24,13	.900 22,86
90584-0312	12	.699 17,75	.550 13,97	.500 12,70					

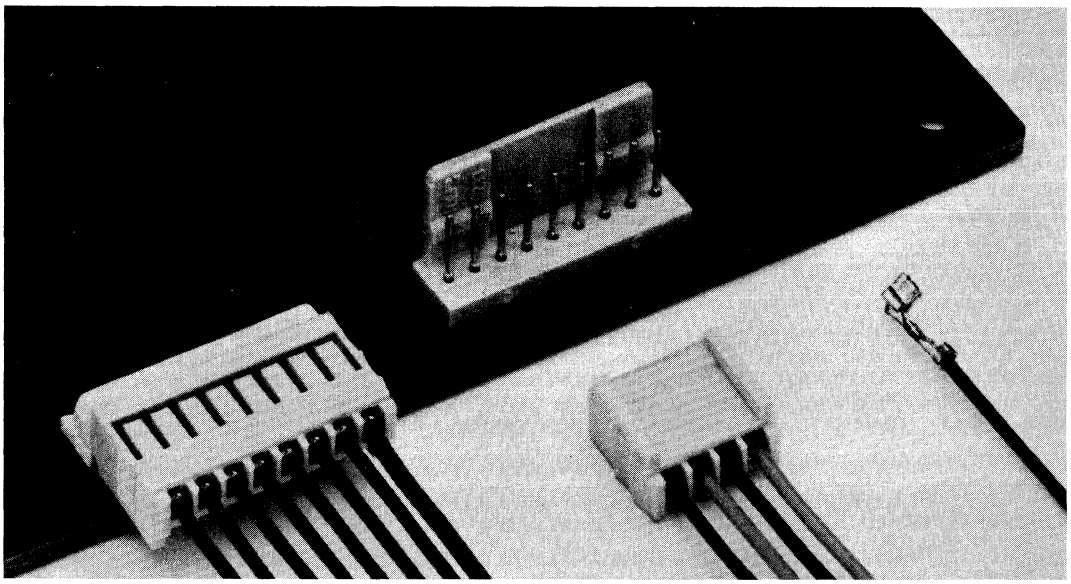
Notes

Spox ™ P.C. Board Interconnection System

molex®

Contents

C



Introduction, Micro, Mini and Standard Spox 2C

Technical Data Reference 3C

.079" 2,0mm Center

Wire-to-Board System 4C-5C

.098" 2,5mm Center

Wire-to-Board Systems 6C-12C

Wire-to-Wire Connectors 13C-14C

.156" 3,96mm Center

Wire-To-Board System 15C-18C

.197" 5,0mm/ .295" 7,5mm Center

Wire-to-Board System 19C-20C

.200" 5,08mm Center

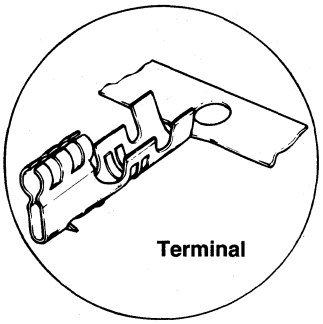
Wire-to-Board System 21C-24C

The Molex Spox™ P.C. Board Interconnection System

C

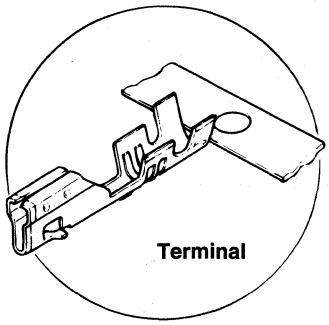
Introduction

All Spox connectors feature strong, durable spring-box terminals which provide high pressure contact with the mating pin and resist the collapsing and deformation which can be caused in assembly. The terminals themselves vary in shape depending on the size of the connector.



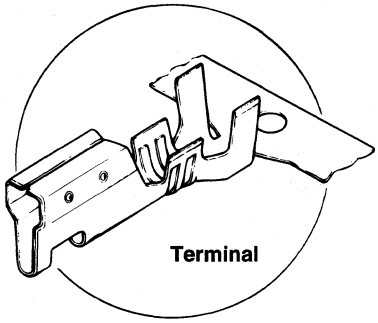
Micro Spox

- .079" 2,0 mm Center Spacings
- Current Rating: 1 amp
- Wire Gauge: 22-30 AWG wire
- The smallest crimp connector of its type available



Mini Spox

- .098" 2,5 mm Center Spacings
- Current Rating: 3 amps
- Wire Gauge: 22-28 AWG
- Also available in wire-to-wire versions



Standard and Macro Spox

- .156" 3,96 mm, .200" 5,08 mm and .197"/.295" 5,0/5,7 mm Center Spacings
- Current Rating: 7 amps
- Wire Gauge: 18-28 AWG

Spox™ Technical Data Reference*

Micro Spox .079" 2,0 mm Center Spacing

UL Recognized (File #E29179)

Voltage Rating - 125 VAC maximum
Current Rating - 1 Amp maximum
Contact Resistance - 20 mΩ maximum (between both ends of mated terminals. Dry circuit of DC 50 mV, 50 mA maximum.)
After 30 cycles: Less than twice initial
Dielectric Withstanding Voltage - 500 VAC for 60 seconds
Insulation Resistance - 1,000 MΩ minimum
Temperature Rise - +30°C maximum
Temperature Range - -40°C to +105°C

Engagement Force - 0.88 lb. 0,40 kg max., initial insertion with tin plated .020" (0,5 mm) round pin
Disengagement Force - 0.33 lb. 0,15 kg min., initial cycle with tin plated .020" (0,5 mm) round pin

Terminal Retention Force in Housing - 3.3 lbs. 1,5 kg minimum
Wire Pullout Force Crimp Strength - 22 AWG 8.8 lbs. 4 kg minimum
30 AWG 1.1 lb. 0,5 kg minimum

*Detailed product specifications should be requested for approval testing.

Mini Spox .098" 2,5 mm Center Spacing

UL Recognized (File #E29179)

Voltage Rating - 250 VAC maximum
Current Rating - 3 Amps maximum
Contact Resistance - 20 mΩ maximum (between both ends of mated terminal. Dry circuit of DC 50 mV, 50 mA maximum.)
After 30 cycles: Less than twice initial
Dielectric Withstanding Voltage - 1,000 VAC for 60 seconds
Insulation Resistance - 1,000 MΩ minimum
Temperature Rise - +30°C maximum
Temperature Range - -40°C to +105°C

Engagement Force - 3.97 lbs. 1,8 kg maximum, initial insertion with tin plated .025" (0,64 mm) square pin
Disengagement Force - .33 lbs. 0,15 kg minimum, initial cycle with tin plated .025" (0,64 mm) square pin

Terminal Retention Force in Housing - 3.3 lbs. 1,5 kg minimum
Crimp Strength - 22 AWG 8.8 lbs. 4,0 kg minimum
28 AWG 2.2 lb. 1,0kg minimum

*Detailed product specifications should be requested for approval testing.

Standard Spox .156" 3,96 mm, .200" 5,08 mm, .197/.295" 5,0/7,5 mm Center Spacing

UL Recognized (File #E29179)
CSA Recognized (File #19980)

Voltage Rating - 250 VAC maximum
Current Rating - 7 Amps maximum
Contact Resistance - 10 mΩ maximum (between both ends of mated terminal. Dry circuit of DC 50 mV, 50 mA maximum.)
After 30 cycles: Less than twice initial
Dielectric Withstanding Voltage - 1,500 VAC for 60 seconds
Insulation Resistance - 1,000 MΩ minimum
Temperature Rise - +30°C maximum
Temperature Range - -40°C to +105°C

Engagement Force - 4.85 lbs. 2,2 kg maximum, initial insertion with tin plated .045" (1,14 mm) square pin
Disengagement Force - 0.7 lbs. 0,3 kg minimum, initial cycle with tin plated .045" (1,14 mm) square pin

Terminal Retention Force in Housing - 6.6 lbs. 3,0 kg minimum
Crimp Strength - 18 AWG 19.8 lbs. 9,0 kg minimum
24 AWG 6.6 lb. 3,0 kg minimum

*Detailed product specifications should be requested for approval testing.

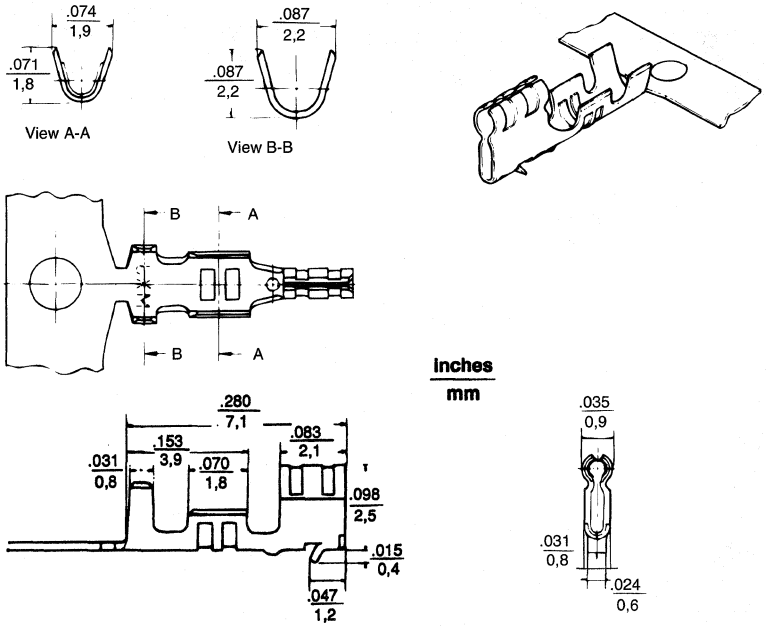
.079" 2,0mm Wire-to-Board System

Available Primarily in the Far East

C

5230 Series
Spring-Box Crimp Terminal

- Low profile
- 4 point contact
- Material: pre-tinned, phosphor bronze
- Used in Molex 5231 housing
- Anti-fishhooking contact design



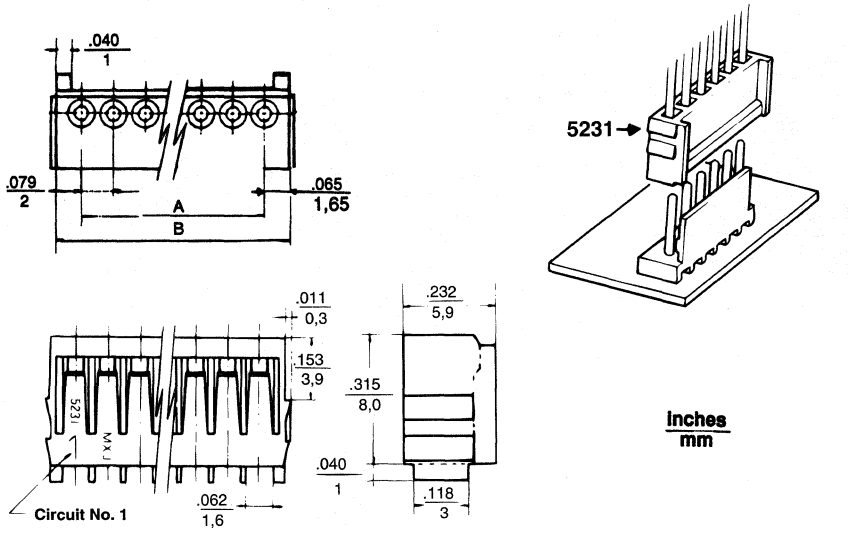
Ordering Information and Dimensions

Order No.	Terminal	Wire Gauge	Insulation Diameter	Contact Material	Hand Tool	Automatic Tooling		Extraction Tool
						Press	Crimp Die	
08-70-0072	Chain	AWG #22~ #30	.054 Ø 1,5 MAX.	Phosphor Bronze	–	M15A 11-26-0033	JM5864A 11-26-0056	J5800-008 11-26-7074
08-70-0073	Loose				JHTR5905 11-26-0070	–	–	

Recommended wire range assumes stranded wire.

5231 Series
Crimp Terminal Housing

- 2-15 Circuits
- Extremely low profile
- UL 94V-0 nylon 6/6
- Friction lock
- Polarized
- Terminal: Molex 5230 terminal
- Mating Wafer: Molex 5233/ 5234



Ordering Information and Dimensions

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	10-01-4024	.079 (2,0)	.217 (5,5)	9	10-01-4094	.630 (16,0)	.768 (19,5)
3	10-01-4034	.157 (4,0)	.295 (7,5)	10	10-01-4104	.709 (18,0)	.846 (21,5)
4	10-01-4044	.236 (6,0)	.374 (9,5)	11	10-01-4114	.787 (20,0)	.925 (23,5)
5	10-01-4054	.315 (8,0)	.453 (11,5)	12	10-01-4124	.866 (22,0)	1.004 (25,5)
6	10-01-4064	.394 (10,0)	.531 (13,5)	13	10-01-4134	.945 (24,1)	1.083 (27,5)
7	10-01-4074	.472 (12,0)	.610 (15,5)	14	10-01-4144	1.024 (26,0)	1.161 (29,5)
8	10-01-4084	.551 (14,0)	.689 (17,5)	15	10-01-4154	1.102 (28,0)	1,240 (31,5)

.079" 2,0mm Wire-to-Board System

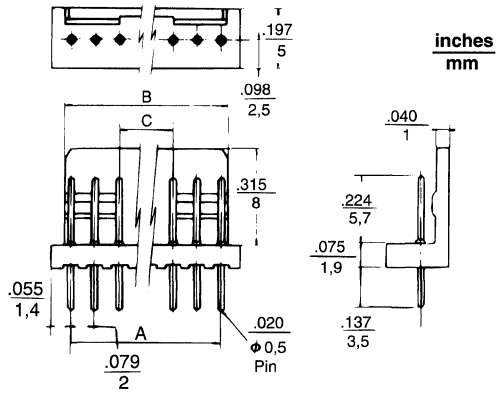
Available Primarily in the Far East

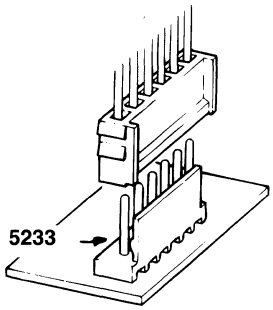
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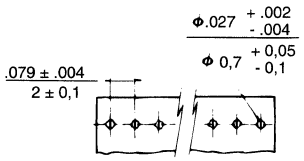
5233 Series

Straight Pin Friction Lock Header

- 2-15 Circuits
- Low profile
- UL 94V-0 nylon 6/6
- Friction lock
- .020" 0,5mm tin-plated brass pin
- Mates with Molex 5231 housing







PCB Layout

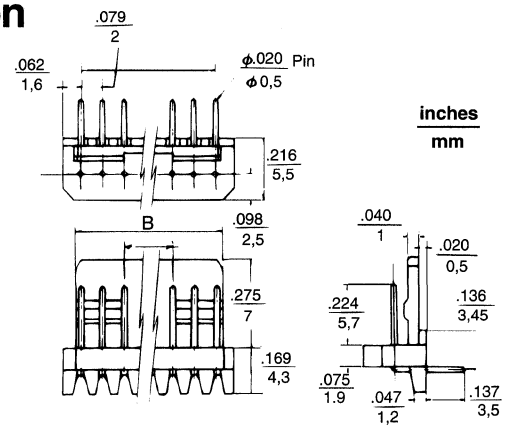
Ordering Information and Dimensions

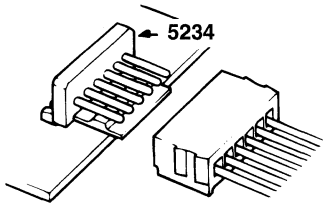
Circuits	Order No.	Dim. A	Dim. B	Dim. C	Circuits	Order No.	Dim. A	Dim. B	Dim. C
2	10-32-1023	.079 (2,0)	.126 (3,2)	—	9	10-32-1093	.630 (16,0)	.677 (17,2)	.315 (8,0)
3	10-32-1033	.157 (4,0)	.205 (5,2)	—	10	10-32-1103	.709 (18,0)	.756 (19,2)	.394 (10,0)
4	10-32-1043	.236 (6,0)	.283 (7,2)	—	11	10-32-1113	.787 (20,0)	.835 (21,2)	.472 (12,0)
5	10-32-1053	.315 (8,0)	.362 (9,2)	—	12	10-32-1123	.866 (22,0)	.913 (23,2)	.551 (14,0)
6	10-32-1063	.394 (10,0)	.441 (11,2)	.079 (2,0)	13	10-32-1133	.945 (24,0)	.992 (25,2)	.630 (16,0)
7	10-32-1073	.472 (12,0)	.520 (13,2)	.157 (4,0)	14	10-32-1143	1.024 (26,0)	1.071 (27,2)	.709 (18,0)
8	10-32-1083	.551 (14,0)	.598 (15,2)	.236 (6,0)	15	10-32-1153	1.102 (28,0)	1,150 (29,2)	.787 (20,0)

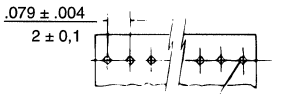
5234 Series

Right Angle Pin Friction Lock Header

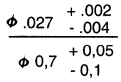
- 2-15 Circuits
- Low profile
- UL 94V-0 nylon 6/6
- Friction lock
- .020" 0,5mm tin-plated brass pin
- Mates with Molex 5231 housing







PCB Layout



Ordering Information and Dimensions

Circuits	Order No.	Dim. A	Dim. B	Dim. C	Circuits	Order No.	Dim. A	Dim. B	Dim. C
2	10-33-1024	.079 (2,0)	.126 (3,2)	—	9	10-33-1094	.630 (16,0)	.677 (17,2)	.315 (8,0)
3	10-33-1034	.157 (4,0)	.205 (5,2)	—	10	10-33-1104	.709 (18,0)	.756 (19,2)	.394 (10,0)
4	10-33-1044	.236 (6,0)	.283 (7,2)	—	11	10-33-1114	.787 (20,0)	.835 (21,2)	.472 (12,0)
5	10-33-1054	.315 (8,0)	.362 (9,2)	—	12	10-33-1124	.866 (22,0)	.913 (23,2)	.551 (14,0)
6	10-33-1064	.394 (10,0)	.441 (11,2)	.079 (2,0)	13	10-33-1134	.945 (24,0)	.992 (25,2)	.630 (16,0)
7	10-33-1074	.472 (12,0)	.520 (13,2)	.157 (4,0)	14	10-33-1144	1.024 (26,0)	1.071 (27,2)	.709 (18,0)
8	10-33-1084	.551 (14,0)	.598 (15,2)	.236 (6,0)	15	10-33-1154	1.102 (28,0)	1,150 (29,2)	.787 (20,0)

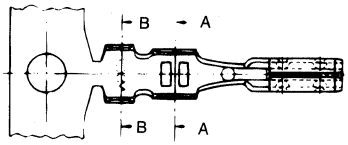
.098" 2,5mm Spox™ Wire-to-Board Crimp Terminal and Housing

Available Primarily in the Far East

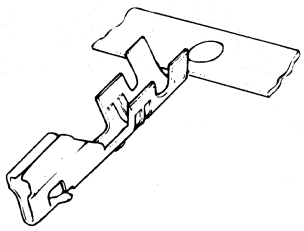
C

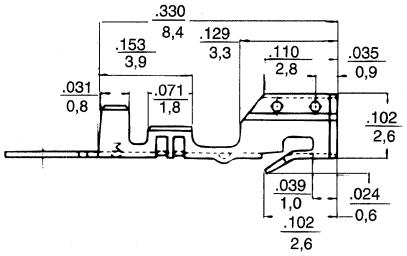
5103 Series
Spring-Box Crimp Terminal

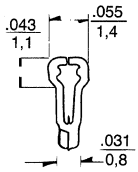
- Low profile
- 4 point contact
- Pre-tinned brass or phospor bronze
- Used in Molex 5102, 5207, 5209 housing series
- Wire range: # 22 - # 28 AWG
- Anti-fishhooking contact design

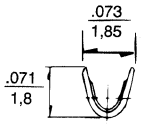


inches
mm

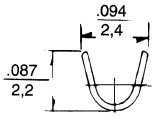








View A-A



View B-B

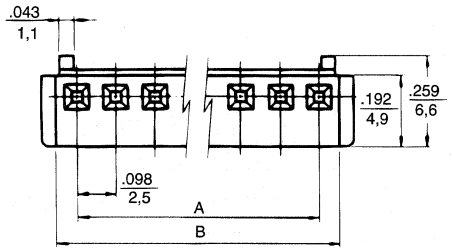
Ordering Information

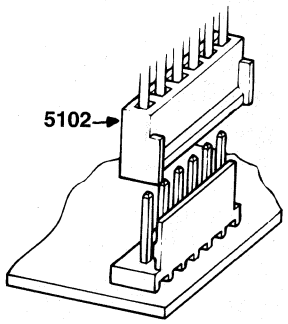
Order No.	Terminal	Wire Gauge	Insulation Diameter	Contact Material	Hand Tool	Automatic Tooling		Extraction Tool
						Press	Crimp Die	
08-70-0056	Chain	AWG #22 ~ #28	Ø1,9 MAX.	Tin Plated Brass	—	M15A 11-26-0033	JM5857A 11-26-0023	11-26-7074 J5800-008
08-70-0057	Loose				JHTR 5907	—		
08-70-0058	Chain			Tin Plated Phos. Bronze		M15A 11-26-0033	JM5857A 11-26-0023	
08-70-0059	Loose				JHTR 5907	—		

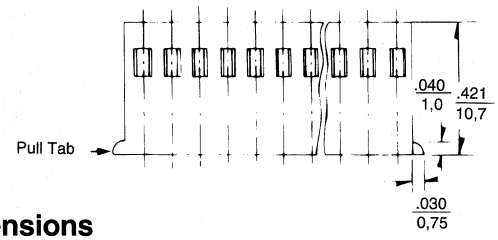
5102 Series
Crimp Terminal Housing

- 2-15 Circuits
- Low profile
- UL 94V-0 nylon 6/6
- Molded pull tab
- Friction lock
- Accepts Molex terminal 5103
- Mates with Molex 5045, 5046 header series

inches
mm







Ordering Information and Dimensions

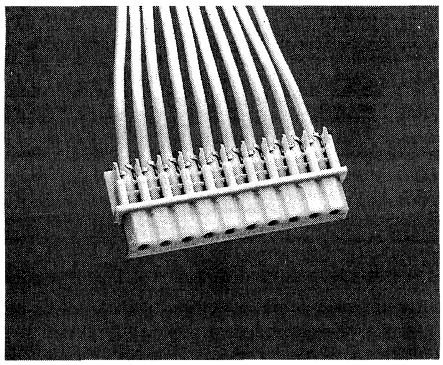
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	22-01-1024	.098 (2,5)	.236 (6,0)	9	22-01-1094	.787 (20,0)	.925 (23,5)
3	22-01-1034	.197 (5,0)	.335 (8,5)	10	22-01-1104	.886 (22,5)	1.024 (26,0)
4	22-01-1044	.295 (7,5)	.433 (11,0)	11	22-01-1114	.984 (25,0)	1.122 (28,5)
5	22-01-1054	.394 (10,0)	.531 (13,5)	12	22-01-1124	1.083 (27,5)	1.220 (31,0)
6	22-01-1064	.492 (12,5)	.630 (16,0)	13	22-01-1134	1.181 (30,0)	1.319 (33,5)
7	22-01-1074	.591 (15,0)	.728 (18,5)	14	22-01-1144	1,280 (32,5)	1.417 (36,0)
8	22-01-1084	.689 (17,5)	.827 (21,0)	15	22-01-1154	1.378 (35,0)	1.516 (38,5)

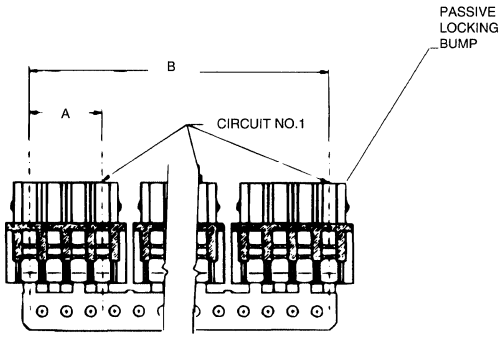
.098" 2,5 mm Spox™ Wire-to-Board System

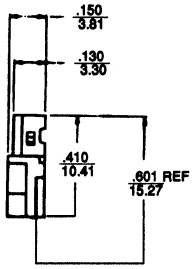
C

42219 Series
Spring-Box Insulation Displacement Connector

- In-line IDT termination
- Integral crimped strain relief
- UL 94V-0 polyester
- Available in standard white or 4 optional colors
- Tin plated phosphor bronze terminals
- Mates with 42249, 42267, 5267-NA and 5268-NA headers
- UL file #E29179, CSA file #LR19980







Note: Connectors supplied on terminal carrier strip for application tooling.

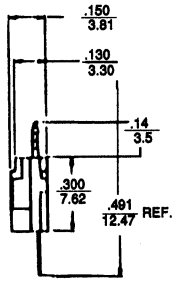
Ordering Information 42219

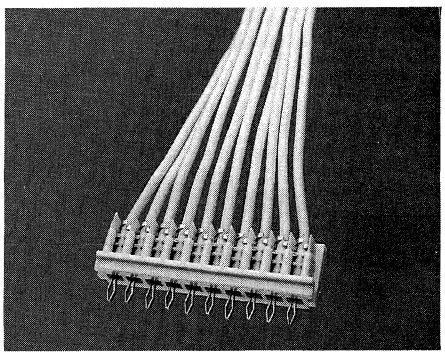
Color	Order No.
Natural (White)	• 22-43-3XX0
Red	22-44-6XX2
Yellow	22-44-6XX1
Orange	22-44-6XX4
Green	22-44-6XX3
Replace "XX" with number of circuits, 02-15	

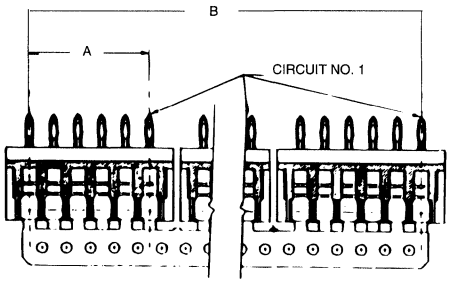
42254 Series
Board-In Insulation Displacement Connector

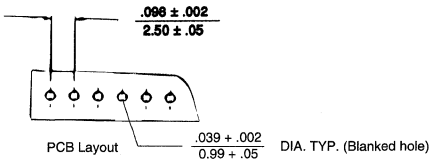
- Solders directly to P.C.B.
- In-line IDT termination
- Integral crimped strain relief
- UL 94V-0 polyester
- Low profile, eliminates headers
- UL file #E29179, CSA file #LR19980

Note: Connectors supplied on terminal carrier strip for application tooling.









Ordering Information 42254

Order No.: • 22-43-2XX0
Replace "XX" with number of circuits, 02-15

Termination Tooling

Pistol Module *	11-31-8939	Manual Discrete Wire	11-21-9492	Manual Ribbon Cable	11-31-8332	Semi-auto	11-20-1201

Dimensions (42219 and 42254)

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.098 (2,5)	2.756 (70,0)	7	.591 (15,0)	2.952 (75,0)	12	1.082 (27,5)	2.362 (60,0)
3	.197 (5,0)	2.953 (75,0)	8	.689 (17,5)	2.461 (62,5)	13	1.181 (30,0)	2.559 (65,0)
4	.295 (7,5)	2.756 (70,0)	9	.787 (20,0)	2.756 (70,0)	14	1.279 (32,5)	2.756 (70,0)
5	.394 (10,0)	2.756 (70,0)	10	.886 (22,5)	1.969 (50,0)	15	1.378 (35,0)	2.952 (75,0)
6	.492 (12,5)	2.556 (65,0)	11	.984 (25,0)	2.165 (55,0)			

• U.S. Standard Product. available through Molex franchised distributors.

* Fits Pistol Handgrip AM-60114

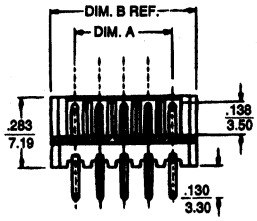
.098" 2,5 mm Spox™ Wire-to-Board System

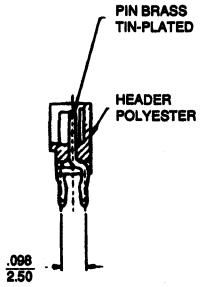
C

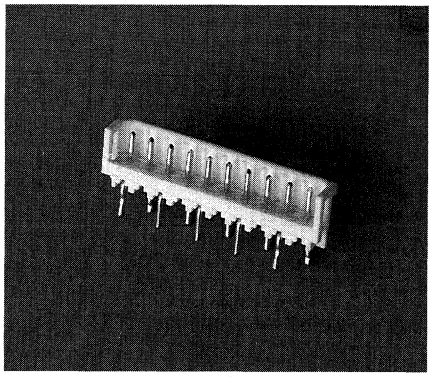
42249 Series
Shrouded Headers, Staggered Footprint

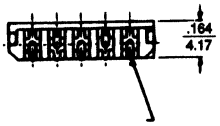
- Polarized to mating connector
- Staggered footprint prevents solder bridging
- Standard kinked P.C. tails for retention to P.C. Board
- UL 94V-0 polyester
- Available in standard white or 4 optional colors
- Tin-plated .027" dia. brass pins
- Mates with 42219 IDT connector
- UL file #E29179, CSA File #LR19980



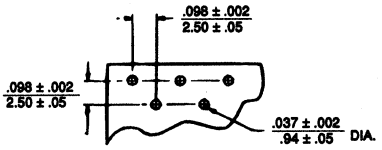








Inches / mm



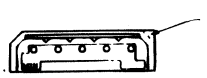
PCB Layout

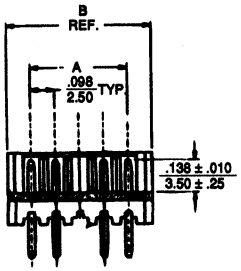
Ordering Information 42249

Color	Order No.
Natural (White)	• 22-43-6XX0
Red	22-44-7XX2
Yellow	22-44-7XX1
Orange	22-44-7XX4
Green	22-44-7XX3
Replace "XX" with number of circuits, 02-15	

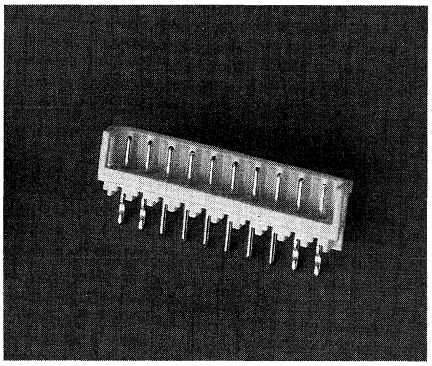
42267 Series
Shrouded Headers, In-line Footprint

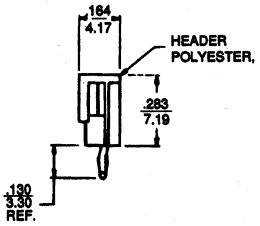
- Polarized to mating connector
- Standard kinked P.C. tails for retention to P.C. Board
- UL 94V-0 polyester
- Available in standard white or 4 optional colors
- Tin-Plated .027" dia. brass pins
- Mates with 42219 IDT connector
- UL file #E29179, CSA file #LR19980

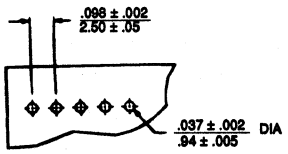




Inches / mm







PCB Layout

Ordering Information 42267

Color	Order No.
Natural (White)	• 22-43-8XX0
Red	22-43-8XX1
Yellow	22-43-8XX4
Orange	22-43-8XX5
Green	22-43-8XX6
Replace "XX" with number of circuits, 02-15	

Dimensions (42249 and 42267)

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.098 (2,5)	.291 (7,4)	7	.591 (15,0)	.783 (19,9)	12	1.083 (27,5)	1.276 (32,4)
3	.197 (5,0)	.390 (9,9)	8	.689 (17,5)	.882 (22,4)	13	1.181 (30,0)	1.374 (34,9)
4	.295 (7,5)	.488 (12,4)	9	.787 (20,0)	.980 (24,9)	14	1.280 (32,5)	1.472 (37,4)
5	.394 (10,0)	.587 (14,9)	10	.886 (22,5)	1.079 (27,4)	15	1.378 (35,0)	1.571 (39,9)
6	.492 (12,5)	.685 (17,4)	11	.984 (25,0)	1.177 (29,9)			

• U.S. Standard Product, available through Molex franchised distributors.

.098" 2,5mm Spox™ Wire-to-Board System

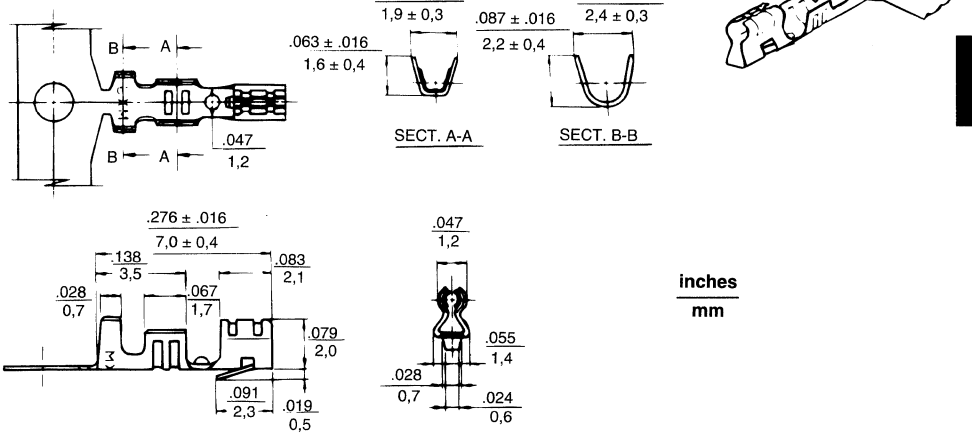
molex

C

5263 Series

Spring-Box Crimp Terminal

- Very low profile
- Material: Pre-tinned phosphor bronze
- Used in 5264 housing
- Anti-fishhooking design
- Box protects pin contact area from contamination during handling



inches / mm

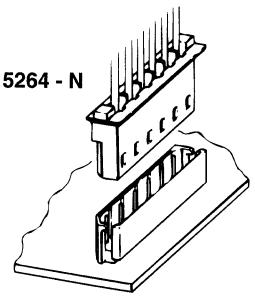
Ordering Information

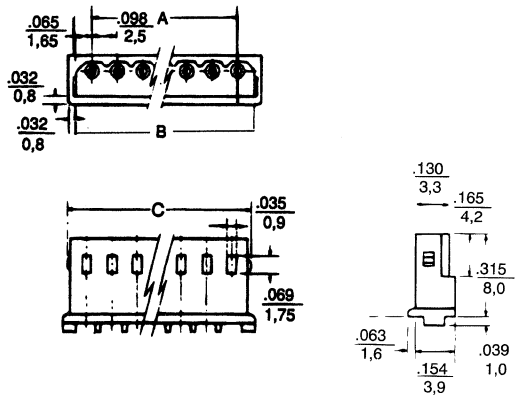
Order No.	Eng. No.	Wire Range	Insulation Diameter	Hand Tool	Tooling	
					Press	Crimp Die
08-70-1039 Chain	5263PBT	AWG #22 ~ #28	.075" Ø1,9 mm Max.		11-26-0033 M15A	JM5996A 11-26-0117
08-70-1040 Loose	5263PBTL			11-26-0167 JHTR5974A		

5264-N Series

Shrouded Crimp Terminal Housing

- Very low profile
- 2-15 Circuits
- UL 94V-0 nylon 6/6
- Accepts Molex 5263 terminal
- Mates with 5267-NA, 5268-NA wafers polarized
- Molded-in pull tabs
- Friction lock





inches / mm

Dimensional Information 5264-N

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
2	.098 2,5	.228 5,8	.252 6,4	6	.492 12,5	.622 15,8	.646 16,4	10	.886 22,5	1.016 25,8	—	13	1.181 30,0	1.311 33,3	—
3	.197 5,0	.327 8,3	.350 8,9	7	.591 15,0	.720 18,3	.744 18,9	11	.984 25,0	1.114 28,3	—	14	1.280 32,5	1.409 35,8	—
4	.295 7,5	.425 10,8	.449 11,4	8	.689 17,5	.819 20,8	.843 21,4	12	1.083 27,5	1.213 30,8	—	15	1.378 35,0	1.508 38,3	—
5	.394 10,0	.524 13,3	.547 13,9	9	.787 20,0	.917 23,3	—				—				—

Ordering Information 5264-N

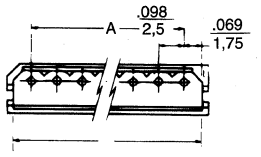
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	50-37-5023	5	50-37-5053	8	50-37-5083	10	50-37-5103	12	50-37-5123	14	50-37-5143
3	50-37-5033	6	50-37-5063	9	50-37-5093	11	50-37-5113	13	50-37-5133	15	50-37-5153
4	50-37-5043	7	50-37-5073								

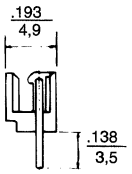
.098" 2,5 mm Spox™ Wire-to-Board System

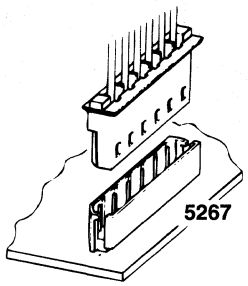
C

5267-NA Series
Straight Pin Fully Shrouded Headers

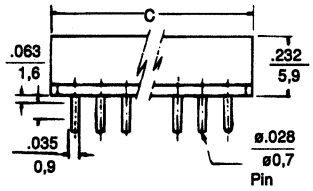
- 2-15 circuits
- UL 94V-0 nylon 6/6
- Tin plated brass pins
- .027" 0,7mm straight round pins
- Polarized
- Mates with 5264 crimp terminal housing and 42219 IDT connector
- Friction lock

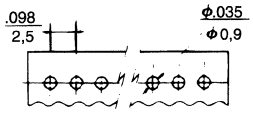






inches
mm





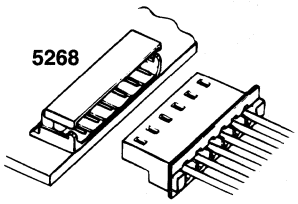
PCB Layout

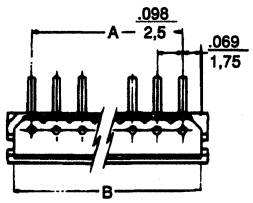
Ordering Information 5267-NA

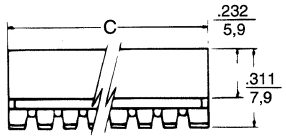
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	22-03-5025	5	22-03-5055	8	22-03-5085	10	22-03-5105	12	22-03-5125	14	22-03-5145
3	22-03-5035	6	22-03-5065	9	22-03-5095	11	22-03-5115	13	22-03-5135	15	22-03-5155
4	22-03-5045	7	22-03-5075								

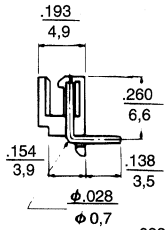
5268-NA Series
Right Angle Fully Shrouded Headers

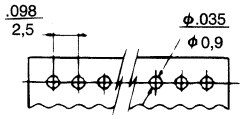
- 2-15 circuits
- UL 94V-0 nylon 6/6
- Tin plated brass pins
- .027" 0,7mm right angle round pins
- Polarized
- Mates with 5264 crimp terminal housing and 42219 IDT connector
- Friction Lock











PCB Layout

inches
mm

Ordering Information 5268-NA

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	22-05-7025	5	22-05-7055	8	22-05-7085	10	22-05-7105	12	22-05-7125	14	22-05-7145
3	22-05-7035	6	22-05-7065	9	22-05-7095	11	22-05-7115	13	22-05-7135	15	22-05-7155
4	22-05-7045	7	22-05-7075								

Dimensional Information 5267-NA and 5268-NA

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
2	.098 2,5	.236 6,0	.291 7,4	6	.492 12,5	.630 16,0	.685 17,4	10	.886 22,5	1.024 26,0	1.079 27,4	13	1.181 30,0	1.319 33,5	1.374 34,9
3	.197 5,0	.335 8,5	.390 9,9	7	.591 15,0	.728 18,5	.783 19,9	11	.984 25,0	1.122 28,5	1.117 29,9	14	1.280 32,5	1.417 36	1.472 37,4
4	.295 7,5	.433 11	.488 12,4	8	.689 17,5	.827 21,0	.882 22,4	12	1.083 27,5	1.220 31	1.276 32,4	15	1.378 35,0	1.516 38,5	1.571 39,9
5	.394 10,0	.531 13,5	.587 14,9	9	.787 20,0	.925 23,5	.980 24,9								

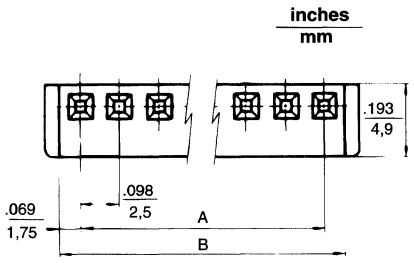
.098" 2,5mm Spox™ Wire-to-Board Crimp Housing and Header

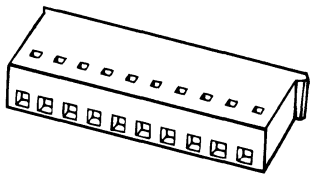
Available Primarily in the Far East

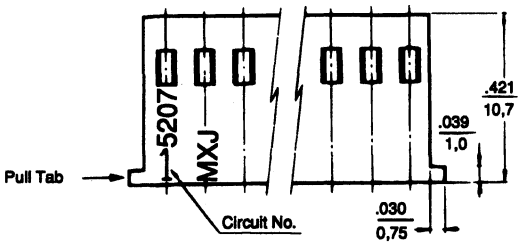
C

5207 Series
Crimp Terminal Housing

- 6-15 Circuits
- Low profile
- UL 94V-0 nylon 6/6
- Molded pull tabs
- Accepts Molex mini-spox 5103 terminal
- Mates with Molex 3022, 3094, 5089 header series





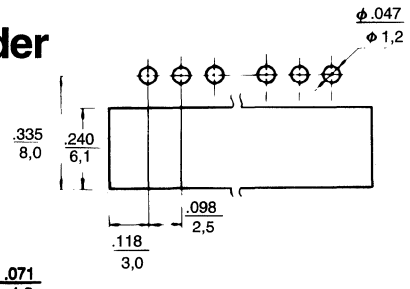


Ordering Information and Dimensions

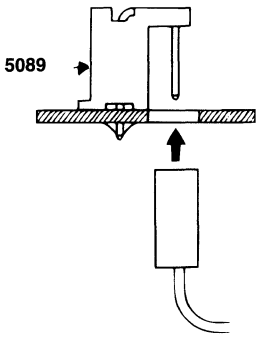
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
6	10-30-8061	.492 (12,5)	.630 (16,0)	11	10-30-8111	.984 (25,0)	1.122 (28,5)
7	10-30-8071	.591 (15,0)	.728 (18,5)	12	10-30-8121	1.083 (27,5)	1.220 (31,0)
8	10-30-8081	.689 (17,5)	.827 (21,0)	13	10-30-8131	1.181 (30,0)	1.319 (33,5)
9	10-30-8091	.787 (20,0)	.925 (23,5)	14	10-30-8141	1.280 (32,5)	1.417 (36,0)
10	10-30-8101	.886 (22,5)	1.024 (26,0)	15	10-30-8151	1.378 (35,0)	1.516 (38,5)

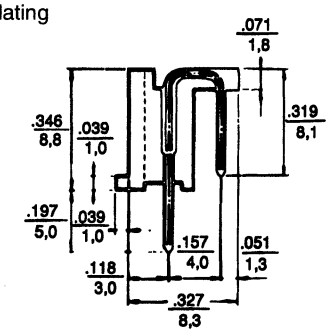
5089 Series
Feed-Thru Polarized Header

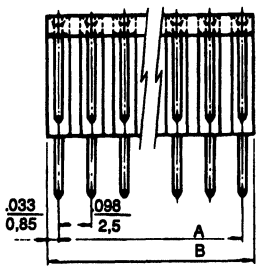
- Bottom entry mount
- Mates with 5207 housing
- UL 94V-2 nylon 6/6
- .025" 0,64mm square pins
- Housing wall polarized to prevent misassembly
- Tin plated brass pins. Plating options available

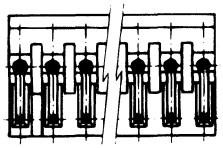


inches
mm









Ordering Information and Dimensions

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
6	22-21-1061	.492 (12,5)	.559 (14,2)	11	22-21-1111	.984 (25,0)	1.051 (26,7)
7	22-21-1071	.591 (15,0)	.657 (16,7)	12	22-21-1121	1.083 (27,5)	1.150 (29,2)
8	22-21-1081	.689 (17,5)	.756 (19,2)	13	22-21-1131	1.181 (30,0)	1.248 (31,7)
9	22-21-1091	.787 (20,0)	.854 (21,7)	14	22-21-1141	1.280 (32,5)	1.346 (34,2)
10	22-21-1101	.886 (22,5)	.953 (24,2)	15	22-21-1151	1.378 (35,0)	1.445 (36,7)

.098" 2,5 mm Spox™ Wire-to-Board Crimp Housing and Headers

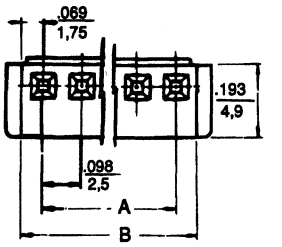
Available Primarily in the Far East

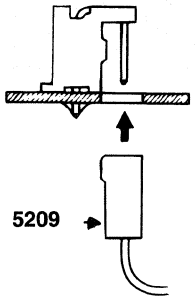
C

5209 Series

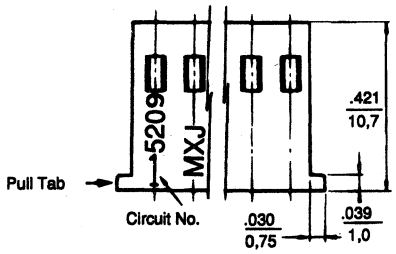
Crimp Terminal Housing

- 2-5 circuits available
- Low profile
- UL 94V-0 nylon 6/6
- Molded pull tabs
- Accepts Molex terminal 5103
- Mates with Molex 5129 bottom entry connector
- Locking Ramp





Inches
mm



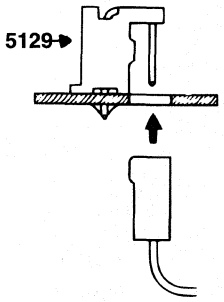
Ordering Information and Dimensions

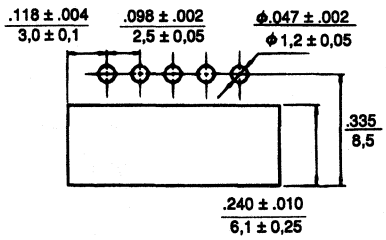
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	10-30-8023	.098 2,5	.236 6,0	4	10-30-8043	.295 7,5	.433 11,0
3	10-30-8033	.197 5,0	.335 8,5	5	10-30-8053	.394 10,0	.531 13,5

5129 Series

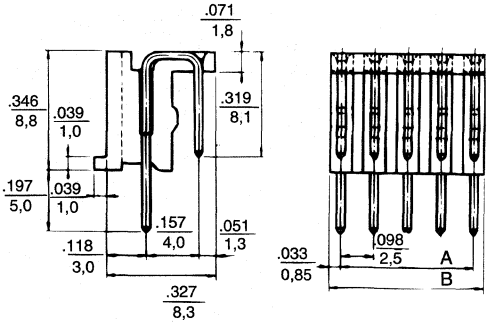
Feed-Thru Friction Lock Header

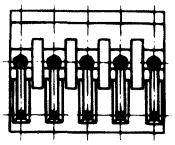
- 2-5 circuits available
- Friction lock for bottom entry wire to board connections
- .025" 0,64mm square wire pins
- UL 94V-2 nylon 6/6
- Mates with 5209 housing
- Tin plated brass pins. Plating options available





Inches
mm





Ordering Information and Dimensions

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	29-04-1028	.098 2,5	.165 4,2	4	29-04-1048	.295 7,5	.362 9,2
3	29-04-1038	.197 5,0	.264 6,7	5	29-04-1058	.394 10,0	.461 11,7

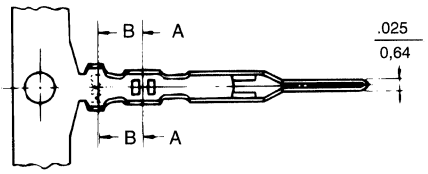
.098" 2,5mm Spox™ Wire-to-Wire Connector

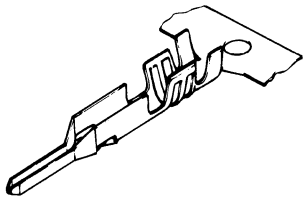
Available Primarily in the Far East

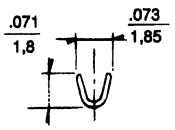
C

5241 Series
Crimp Terminal, Male

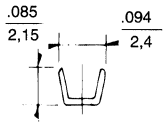
- Rigid contact
- Pre-tinned brass
- Used in Molex 5240 housing series
- Wire range — 22-28 AWG
- Mates with Molex mini terminal 5103



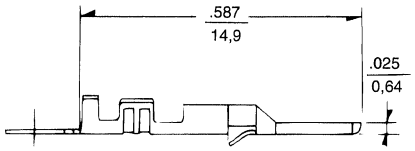


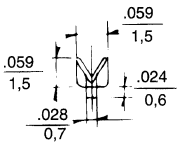


A-A



B-B





inches
mm

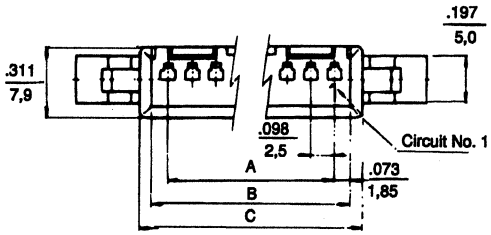
Ordering Information and Dimensions

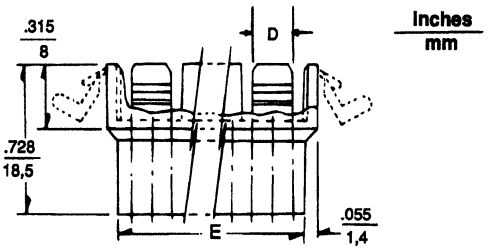
Order No.	Terminal	Wire Gauge	Insulation Diameter	Contact Material	Hand Tool	Automatic Tooling		Extraction Tool
						Press	Crimp Die	
08-70-0102	Chain	AWG #22 - #28 #26 - #28	1,9mm MAX. 1,3 - 1,6mm 0,8 - 1,3mm	Tin Plated Brass	—	11-26-0033 M15A	11-26-0050 M5860A	J5800-005 11-26-0060
08-70-0103	Loose				JHT2262A 11-26-0009 JHTR 2262J 11-26-0025			

Recommended wire range assumes stranded wire.

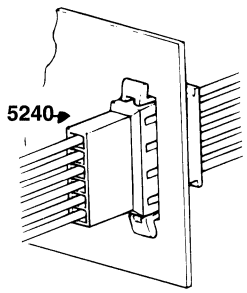
5240 Series
Plug Housing

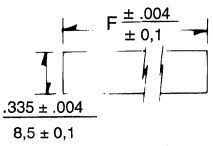
- 2-12 Circuits
- Wire-to-wire application
- Mounting ears (5240-N)
- Without mounting ears (5240-N1)
- UL 94V-0, nylon 6/6
- Accepts Molex-mini terminal 5241
- Mates with Molex 5102 housing series





Inches
mm





Recommended Panel Slot

Ordering Information and Dimensions

	With Ears	Without Ears						
Circuits	Order No.	Order No.	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F
2	29-11-0022	29-11-0023	.098 2,5	.244 6,2	.338 8,6	.098 2,5	.228 5,8	.488 12,4
3	29-11-0032	29-11-0033	.197 5,0	.342 8,7	.437 11,1	.197 5,0	.327 8,3	.587 14,9
4	29-11-0042	29-11-0043	.295 7,5	.440 11,2	.535 13,6	.295 7,5	.425 10,8	.685 17,4
5	29-11-0052	29-11-0053	.393 10,0	.539 13,7	.633 16,1	.145 3,7	.524 13,3	.783 19,9
6	29-11-0062	29-11-0063	.492 12,5	.637 16,2	.732 18,6	.197 5,0	.622 15,8	.882 22,4
7	29-11-0072	29-11-0073	.591 15,0	.736 18,7	.830 21,1	.197 5,0	.720 18,3	.980 24,9
8	29-11-0082	29-11-0083	.689 17,5	.834 21,2	.929 23,6	.197 5,0	.819 20,8	1.079 27,4
9	29-11-0092	29-11-0093	.787 20,0	.933 23,7	1.027 26,1	.197 5,0	.917 23,3	1.177 29,9
10	29-11-0102	29-11-0103	.886 22,5	1.031 26,2	1.125 28,6	.197 5,0	1.016 25,8	1.276 32,4
11	29-11-0112	29-11-0113	.984 25,0	1.130 28,7	1.224 31,1	.197 5,0	1.114 28,3	1.374 34,9
12	29-11-0122	29-11-0123	1.083 27,5	1.228 31,2	1.323 33,6	.197 5,0	1.213 30,8	1.472 37,4

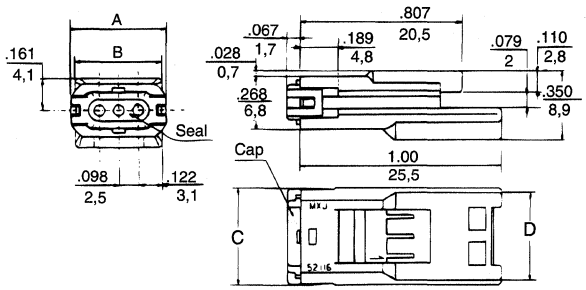
.098" 2,5 mm Sealed Wire-to-Wire Connector System

Available Primarily in the Far East

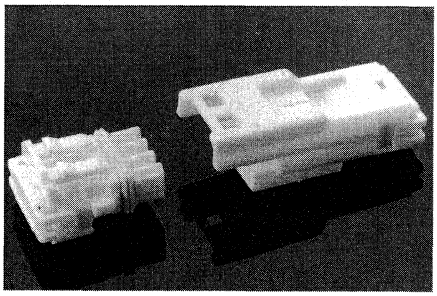
C

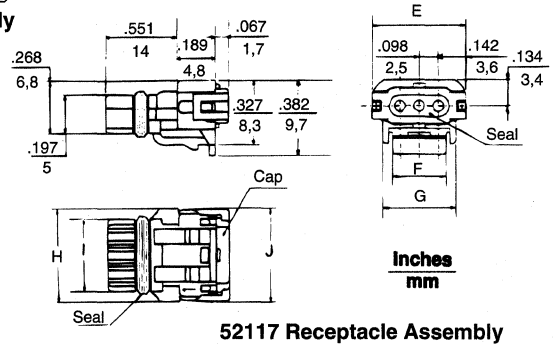
52116
Plug
52117
Receptacle

- Housing: Glass-filled polyester
- Cap: Nylon 6/6
- Seal: Silicon
- 250V, 3 Amps, max.
- For AWG # 22
- Other colors available; contact factory



52116 Plug Assembly





52117 Receptacle Assembly

Ordering Information and Dimensions

PLUG

Circuit Size	2	3	4
Order No.	52116-0240	52116-0340	52116-0410
Dim. A	.488 **12,4**	.488 **12,4**	.587 **14,9**
Dim. B	.441 **11,2**	.441 **11,2**	.539 **13,7**
Dim. C	.488 **12,4**	.488 **12,4**	.587 **14,9**
Dim. D	.441 **11,2**	.441 **11,2**	.539 **13,7**

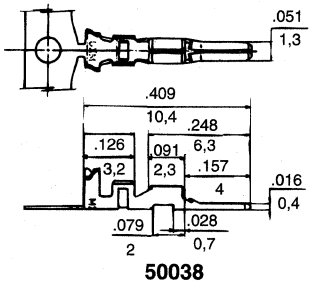
RECEPTACLE

Circuit Size	2	3	4
Order No.	52117-0240	52117-0340	52117-0410
Dim. E	.480 **12,2**	.480 **12,2**	.578 **14,7**
Dim. F	.276 **7,0**	.276 **7,0**	.374 **9,5**
Dim. G	.378 **9,6**	.378 **9,6**	.476 **12,1**
Dim. H	.488 **12,4**	.488 **12,4**	.586 **14,9**
Dim. I	.378 **9,6**	.378 **9,6**	.476 **12,1**
Dim. J	.488 **12,4**	.488 **12,4**	.578 **14,7**

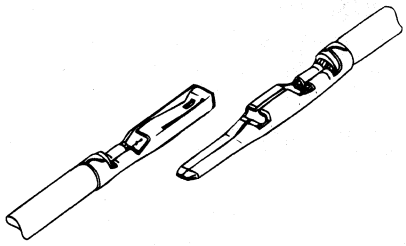
50038
Male Crimp Terminal For 52116 Plug

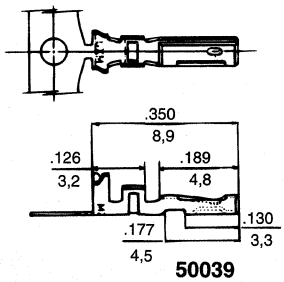
50039
Female Crimp Terminal For 52117 Receptacle

- Wire range: AWG #22
- Insulation diameter: ⌀1.8mm max.
- Strip length: 20±0.5mm
- For use with 52116 (50038)
- For use with 52117 (50039)



50038





50039

Inches
mm

Ordering Information

Order No.	Terminal	Contact Material	Terminal		Automatic Tooling		Hand Tool	Extraction Tool	Insertion Tool
			Amp	Volt	Press	Crimp Die			
50038-8000	Chain	Tin Plated Phos-bronze	3A	125V	M15A 57117-4000	57084-3000	—	—	—
50039-8000									
50038-8100	Loose				—	—	57085-5000 57086-5000		
50039-8100									

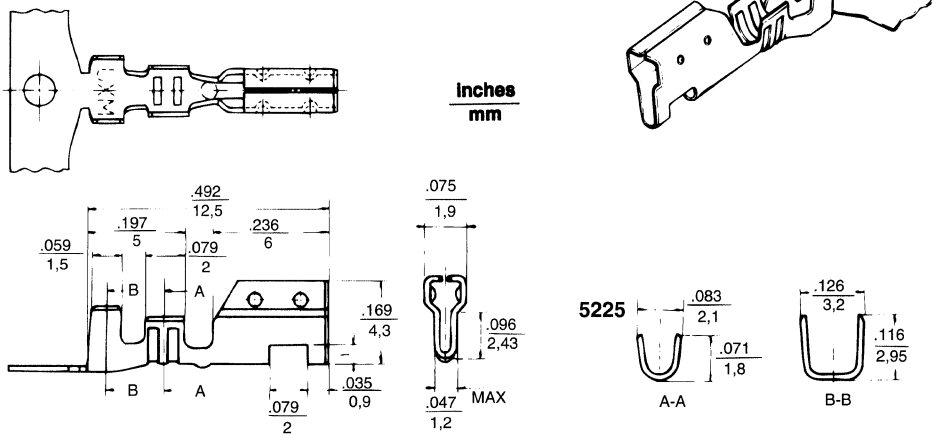
.156" 3,96mm Spox™ Crimp Terminal and Housing

Available Primarily in the Far East

C

5194 / 5225 Series
Spring-Box Crimp Terminal

- 4 point contact
- Used in Molex 5195, 5196, 5197, 5198 housing series
- Wire range: #18-#24 AWG and 22-28 AWG
- Anti-fishhooking contact design
- Current rating 7 amps max.



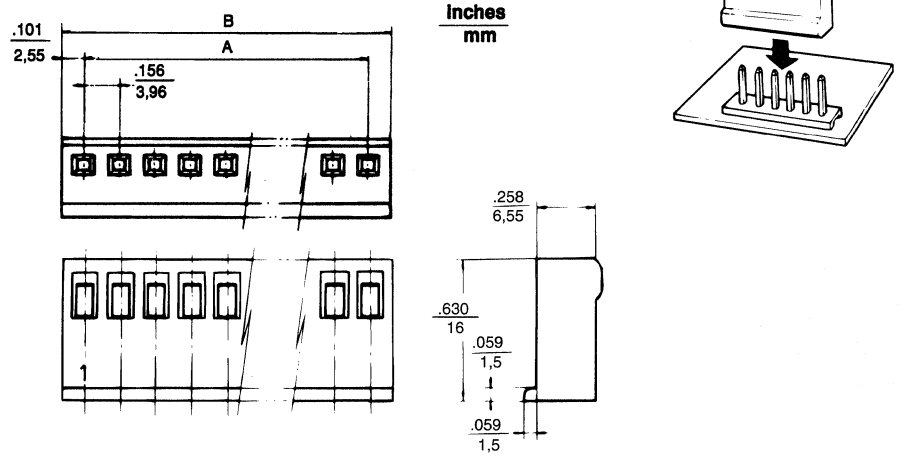
Ordering Information and Dimensions

Order No.	Terminal	Wire Gauge	Insulation Diameter	Contact Material	Automatic Tooling		Tool
					Press	Crimp Die	
08-70-1031	Chain	AWG #18 ~ #24	∅ 1,3mm ~3,2mm	Tin Plated Brass	11-26-0033 M15A	11-26-0028 JM5859A	11-26-0058 JHTR5904
08-70-1030	Loose				—		
08-70-1029	Chain	AWG #22 ~ #28	∅ 1,2mm ~2,6mm		11-26-0033 M15A	11-26-0028 JM5859A	
08-70-1028	Loose				—	—	

Recommended wire range assumes stranded wire.

5195 Series
Crimp Terminal Housing

- 2-12 Circuits
- With locking ramp
- Molded in locking arm for terminal
- UL 94V-2 nylon 6/6
- Accepts Molex spox terminal 5194 / 5225
- Mates with Molex 5271, 5272, 5273, 5274, 5292 header series



Ordering Information and Dimensions

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	09-50-1021	.156 3,96	.357 9,06	8	09-50-1081	1.092 27,74	1.292 32,82
3	09-50-1031	.312 7,92	.513 13,02	9	09-50-1091	1.248 31,70	1,448 36,78
4	09-50-1041	.468 11,89	.669 16,98	10	09-50-1101	1.404 35,66	1.604 40,74
5	09-50-1051	.624 15,85	.824 20,94	11	09-50-1111	1.560 39,62	1.760 44,7
6	09-50-1061	.780 19,81	.980 24,9	12	09-50-1121	1.716 43,59	1.916 48,66
7	09-50-1071	.936 23,77	1.136 28,86				

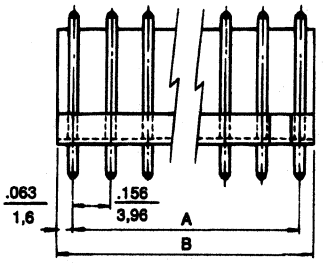
.156" 3,96mm Spox™ Headers

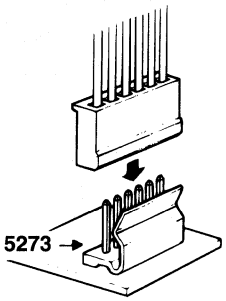
Available Primarily in the Far East

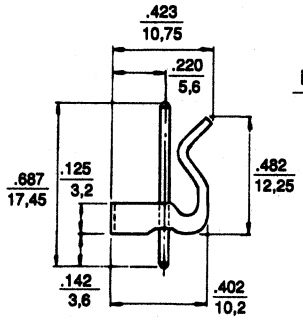
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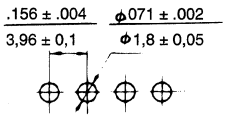
5273 Series
Straight Pin Friction Lock Header

- Mates with 5195 series housing
- UL 94V-2 nylon 6/6
- 2-8 Circuits
- .045" 1,14mm square pins
- Tin plated brass pins. Plating options available









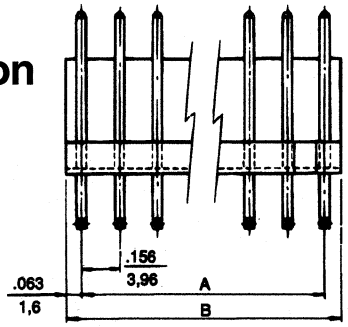
PCB Layout

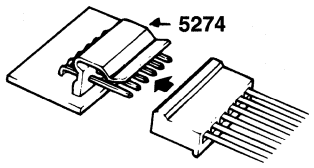
Ordering Information and Dimensions

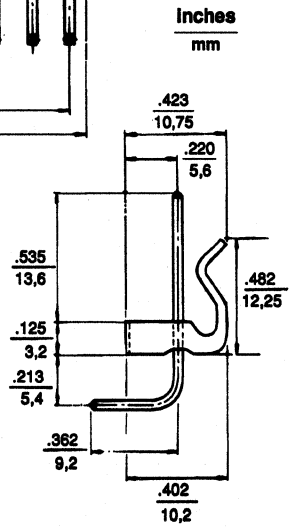
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	09-65-2028	.156 3,96	.282 7,16	6	09-65-2068	.780 19,81	.906 23,0
3	09-65-2038	.312 7,92	.438 11,13	7	09-65-2078	.936 23,77	1.06 26.9
4	09-65-2048	.468 11,89	.591 15,0	8	09-65-2088	1.092 27,74	1.22 30,9
5	09-65-2058	.624 15,85	.748 19,0				

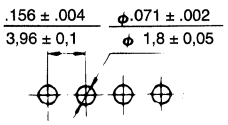
5274 Series
Right Angle Pin Friction Lock Header

- Mates with 5195 series housing
- UL 94V-2 nylon 6/6
- 2-6 Circuits
- .045" 1,14mm square pins
- Tin plated brass pins. Plating options available









PCB Layout

Ordering Information and Dimensions

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	09-75-2024	.156 3,96	.282 7,16	5	09-75-2054	.624 15,85	.724 19,0
3	09-75-2034	.312 7,92	.438 11,13	6	09-75-2064	.780 19,81	.906 23,0
4	09-75-2044	.468 11,89	.591 15,0				

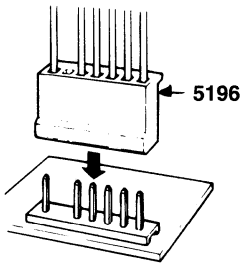
.156" 3,96mm Spox™ Crimp Housing and Header

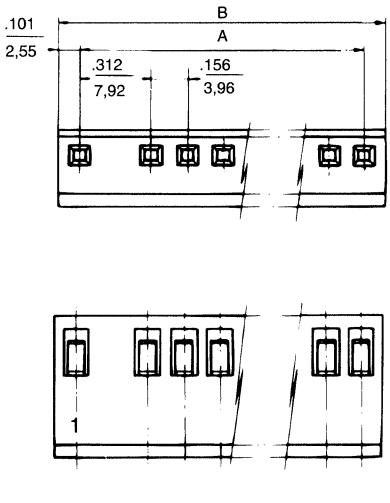
Available Primarily in the Far East

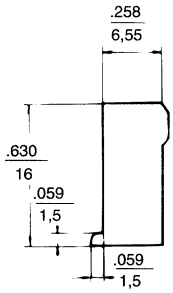
C

5196 Series
Crimp Terminal Housing

- 3-11 Circuits
- UL 94V-2 nylon 6/6
- With locking ramp
- 2nd circuits blanked for polarization
- Molded pull tab
- Molded in locking arm for terminal
- Accepts Molex spox terminal 5194 / 5225
- Mates with Molex 5275, 5276, 5277 header series







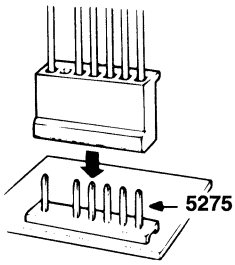
Inches
mm

Ordering Information and Dimensions

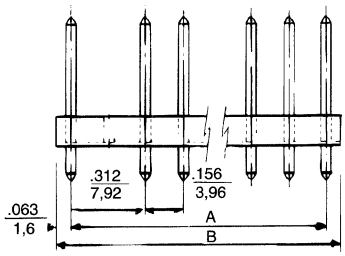
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
3	09-50-1033	.468 11,89	.669 16,98	8	09-50-1083	1.248 31,70	1.448 36,78
4	09-50-1043	.624 15,85	.824 20,94	9	09-50-1093	1.404 35,66	1.604 40,74
5	09-50-1053	.780 19,81	.980 24,9	10	09-50-1103	1.560 39,62	1.760 44,7
6	09-50-1063	.936 23,77	1.136 28,86	11	09-50-1113	1.716 43,59	1.916 48,66
7	09-50-1073	1.092 27,74	1.292 32,82				

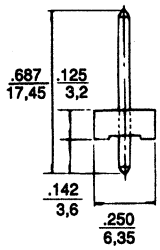
5275 Series
Straight Pin Header

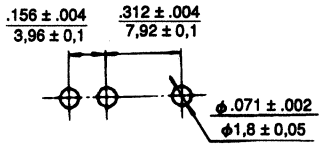
- 3-11 Circuits
- .045" 1,14mm square wire pins
- UL 94V-2 nylon 6/6
- 2nd circuit blanked for polarization
- Mates with 5196 series housing
- Tin plated brass pins. Plating options available



Inches
mm







PCB Layout

Ordering Information and Dimensions

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
3	09-67-4032	.468 11,89	.594 15,08	8	09-67-4082	1.248 31,70	1.373 34,88
4	09-67-4042	.624 15,85	.750 19,04	9	09-67-4092	1.404 35,66	1.529 38,84
5	09-67-4052	.780 19,81	.906 23,0	10	09-67-4102	1.560 39,62	1.685 42,8
6	09-67-4062	.936 23,77	1.061 26,96	11	09-67-4112	1.716 43,59	1.841 46,76
7	09-67-4072	1.092 27,74	1.217 30,92				

.156" 3,96mm Spox™ Headers

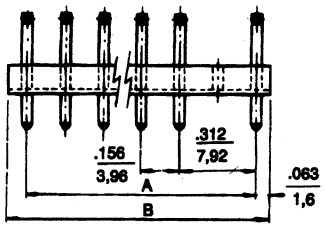
Available Primarily in the Far East

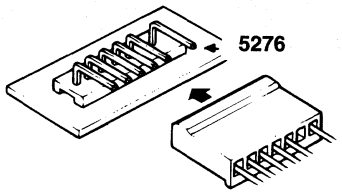
C

5276 Series

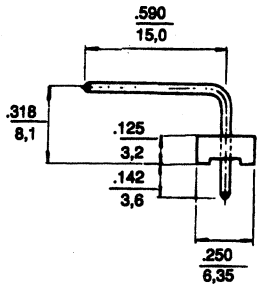
Right Angle Pin Flat Headers

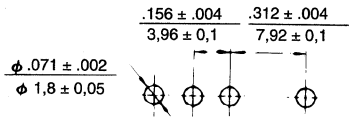
- .045" 1,14mm right angle square wire pins
- 3-11 Circuits
- UL 94V-2 nylon 6/6
- Mates with 5196 housing
- Tin plated brass pins. Plating options available





Inches / mm





PCB Layout

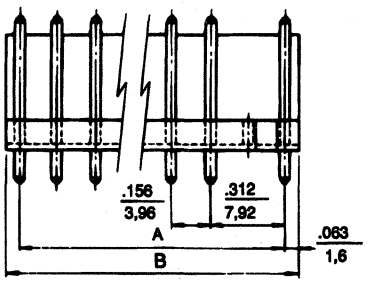
Ordering Information and Dimensions

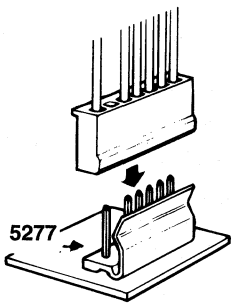
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
3	09-66-5033	.468 11,89	.594 15,08	8	09-66-5083	1.248 31,70	1.373 34,88
4	09-66-5043	.624 15,85	.750 19,04	9	09-66-5093	1.404 35,66	1.529 38,84
5	09-66-5053	.780 19,81	.906 23,0	10	09-66-5103	1.560 39,62	1.685 42,8
6	09-66-5063	.936 23,77	1.061 26,96	11	09-66-5113	1.716 43,59	1.841 46,76
7	09-66-5073	1.092 27,74	1.217 30,92				

5277 Series

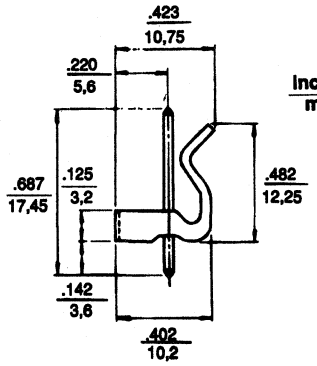
Straight Pin Friction Lock Headers

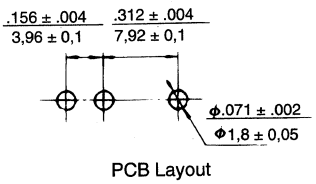
- Locking ramp
- .045" 1,14mm straight square wire pins
- 3-7 Circuits
- UL 94V-2 nylon 6/6
- Mates with 5196 housing
- Tin plated brass pins. Plating options available





Inches / mm





PCB Layout

Ordering Information and Dimensions

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
3	09-65-2039	.468 11,89	.594 15,08	6	09-65-2069	.936 23,77	1.061 26,96
4	09-65-2049	.624 15,85	.750 19,04	7	09-65-2079	1.092 27,74	1.217 30,92
5	09-65-2059	.780 19,81	.906 23,0				

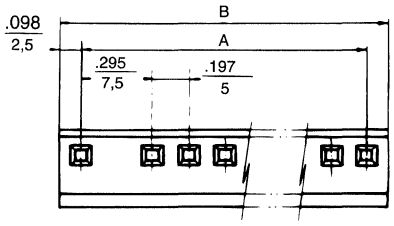
.197" 5,0mm / .295" 7,5mm Spox™ Crimp Housing and Header

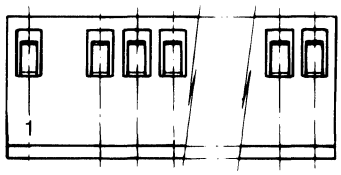
Available Primarily in the Far East

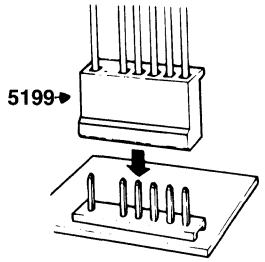
C

5199 Series
Crimp Terminal Housing

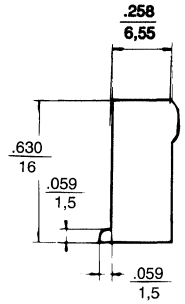
- 2-6 Circuits available
- UL 94V-2 nylon 6/6
- Polarization through varied center spacing between circuit 1 & 2
- With locking ramp
- Molded pull tab
- Molded in locking arm for terminal
- Accepts Molex spox terminal 5194 / 5225
- Mates with Molex 5287, 5288, 5289 header series







Inches
mm

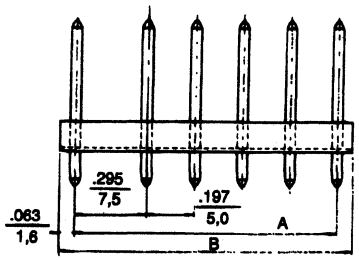


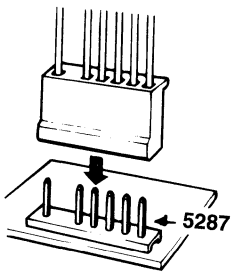
Ordering Information and Dimensions

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	10-63-3024	.295 7,5	.492 12,5	5	10-63-3054	.886 22,5	1.083 27,5
3	10-63-3034	.492 12,5	.689 17,5	6	10-63-3064	1.083 27,5	1.280 32,5
4	10-63-3044	.689 17,5	.886 22,5				

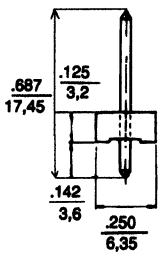
5287 Series
Straight Pin Headers

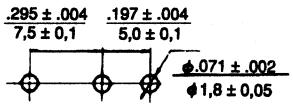
- 2-6 Circuits available
- UL 94V-2 nylon 6/6
- Polarization through varied center spacing between circuit 1 and 2
- Mates with 5199 housing
- .045" 1,14mm straight square pin
- Tin plated brass pins. Plating options available





Inches
mm





PCB Layout

Ordering Information and Dimensions

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	10-63-3023	.295 7,5	.421 10,7	5	10-63-3053	.886 22,5	1.012 25,7
3	10-63-3033	.492 12,5	.618 15,7	6	10-63-3063	1.083 27,5	1.209 30,7
4	10-63-3043	.689 17,5	.815 20,7				

.197" 5,0mm / .295" 7,5mm Spox™ Crimp Connector and Header

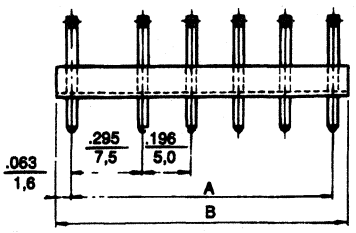
Available Primarily in the Far East

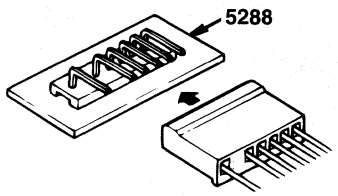
C

5288 Series

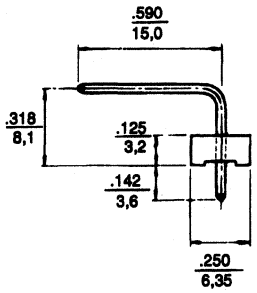
Right Angle Pin Header

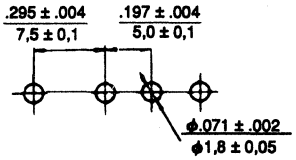
- 2-6 Circuits available
- UL 94V-2 nylon 6/6
- Polarization through varied center spacing between circuit 1 and 2
- .045" 1,14mm straight square wire pins
- Mates with 5199 connector housing
- Tin plated brass pins. Plating options available





Inches
mm





PCB Layout

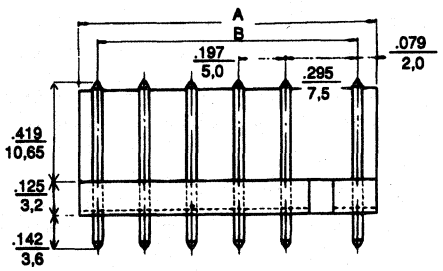
Ordering Information and Dimensions

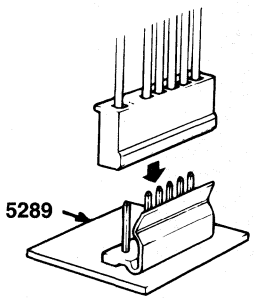
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	10-68-3021	.295 7,5	.421 10,7	5	10-68-3051	.886 22,5	1.012 25,7
3	10-68-3031	.492 12,5	.615 15,62	6	10-68-3061	1.083 27,5	1.209 30,7
4	10-68-3041	.689 17,5	.811 20,60				

5289 Series

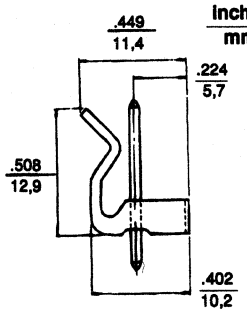
Straight Pin Friction Lock Header

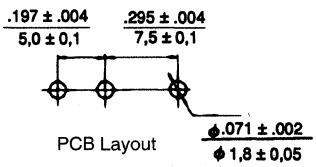
- Locking ramp
- 2-6 Circuits
- UL 94V-2 nylon 6/6
- Polarization through varied center spacing between circuit 1 and 2
- .045" 1,14mm straight square wire pins
- Mates with 5199 connector housing
- Tin plated brass pins. Plating options available





Inches
mm





PCB Layout

Ordering Information and Dimensions

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	10-31-1028	.295 7,5	.453 11,5	5	10-31-1058	.886 22,5	1.043 26,5
3	10-31-1038	.492 12,5	.650 16,5	6	10-31-1068	1.083 27,5	1.240 31,5
4	10-31-1048	.689 17,5	.846 21,5				

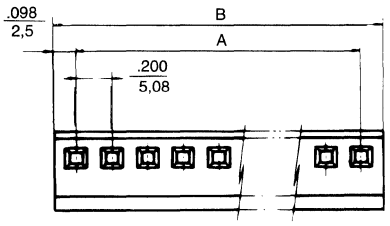
.200" 5,08mm Spox™ Wire-to-Board Crimp Housing and Header

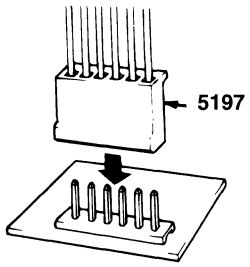
Available Primarily in the Far East

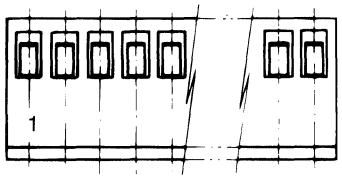
C

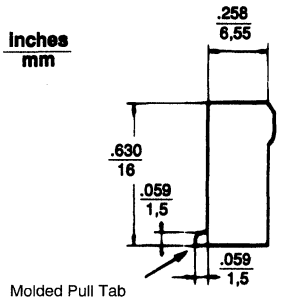
5197 Series
Crimp Terminal Housing

- 2-9 Circuits
- UL 94V-2 nylon 6/6
- Molded pull tab
- With locking ramp
- Molded in locking arm for terminal
- Accepts Molex spox terminal 5194 / 5225
- Mates with Molex 5279, 5280, 5281, 5282, 5293 header series









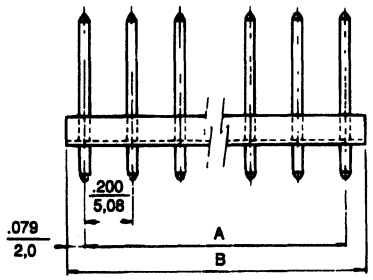
Molded Pull Tab

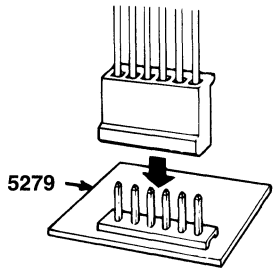
Ordering Information and Dimensions

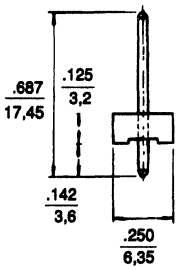
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	10-01-3026	.200 5,08	.397 10,08	6	10-01-3066	1.000 25,40	1.197 30,40
3	10-01-3036	.400 10,16	.597 15,16	7	10-01-3076	1.200 30,48	1.397 35,48
4	10-01-3046	.600 15,24	.797 20,24	8	10-01-3086	1.400 35,56	1.597 40,56
5	10-01-3056	.800 20,32	.997 25,32	9	10-01-3096	1.600 40,64	1.797 45,64

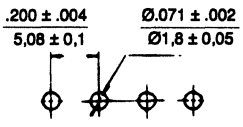
5279 Series
Straight Pin Flat Header

- 2-9 Circuits
- UL 94V-2 nylon 6/6
- .045" 1,14mm straight square wire pin
- Mates with 5197 housing
- Tin plated brass pins. Plating options available









PCB Layout

Ordering Information and Dimensions

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	10-02-1027	.200 5,08	.357 9,08	6	10-02-1067	1.000 25,40	1.157 29,40
3	10-02-1037	.400 10,16	.557 14,16	7	10-02-1077	1.200 30,48	1.357 34,48
4	10-02-1047	.600 15,24	.757 19,24	8	10-02-1087	1.400 35,56	1.557 39,57
5	10-02-1057	.800 20,32	.957 24,32	9	10-02-1097	1.600 40,64	1.757 44,64

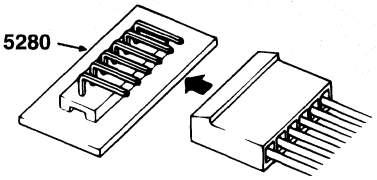
.200" 5,08mm Spox™ Header

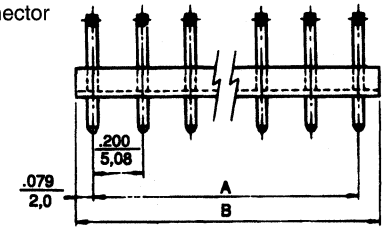
Available Primarily in the Far East

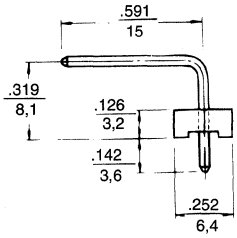
C

5280-NA Series
Right Angle Pin Header

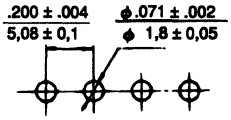
- 2-9 circuits
- UL 94V-2 nylon 6/6
- .045" 1,14mm square wire pins
- Mates with 5197 connector housing
- Tin plated brass pins







Inches / mm



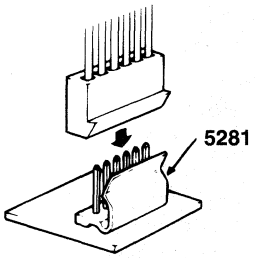
PCB Layout

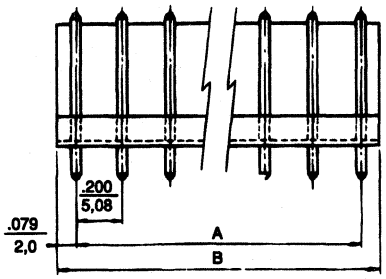
Ordering Information and Dimensions

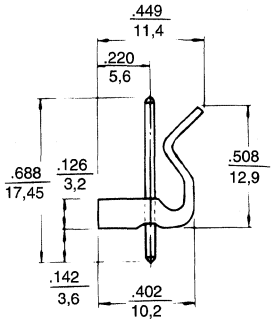
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	10-33-1021	.197 5,0	.354 9,0	6	10-33-1061	1.000 25,4	1.157 29,4
3	10-33-1031	.398 10,1	.555 14,1	7	10-33-1071	1.197 30,4	1,354 34,4
4	10-33-1041	.599 15,2	.756 19,6	8	10-33-1081	1.398 35,5	1.555 39,5
5	10-33-1051	.799 20,3	.957 24,3	9	10-33-1091	1.598 40,6	1.756 44,6

5281-NA Series
Straight Pin Friction Lock Header

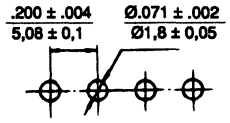
- 2-9 circuits
- UL 94V-2 nylon 6/6
- .045" 1,14mm square wire pins
- Mates with 5197 connector housing
- Tin plated brass pins







Inches / mm



PCB Layout

Ordering Information and Dimensions

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	10-32-1021	.197 5,0	.354 9,0	6	10-32-1061	1.000 25,4	1.157 29,4
3	10-32-1031	.398 10,1	.555 14,1	7	10-32-1071	1.197 30,4	1.354 34,4
4	10-32-1041	.599 15,2	.756 19,6	8	10-32-1081	1.398 35,5	1.555 39,5
5	10-32-1051	.799 20,3	.957 24,3	9	10-32-1091	1.598 40,6	1.756 44,6

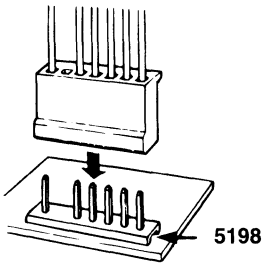
.200" 5,08mm Spox™ Wire-to-Board Crimp Housing and Header

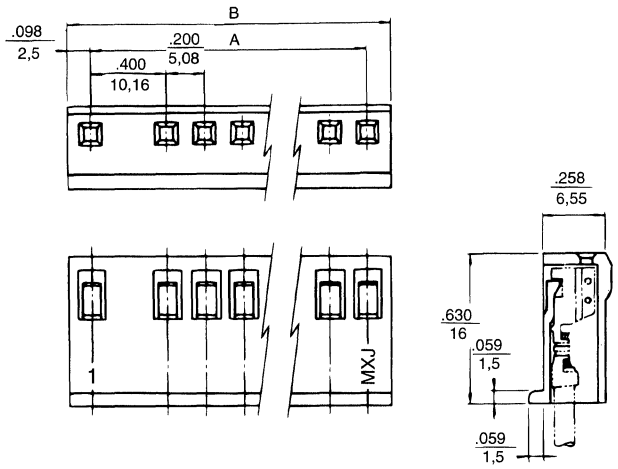
Available Primarily in the Far East

C

5198-N
Crimp Terminal Housing

- 3-8 circuits
- Same as 5197 but with second circuit void





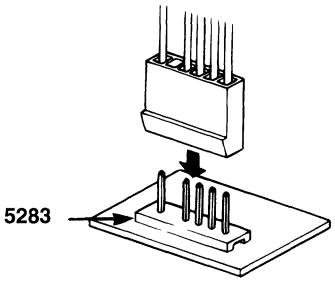
Inches
mm

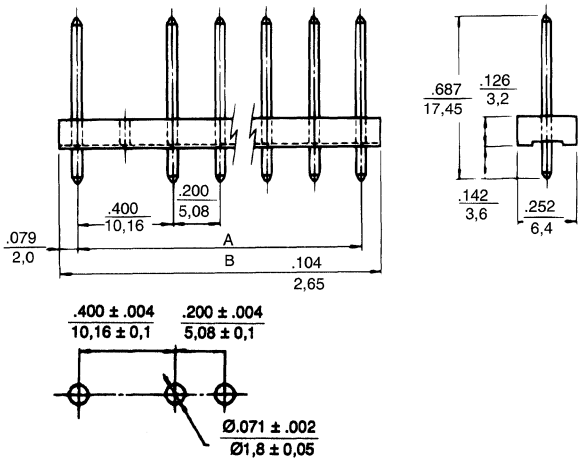
Ordering Information and Dimensions

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
3	10-22-1032	.599 15,2	.795 20,2	6	10-22-1062	1.197 30,4	1.394 35,4
4	10-22-1042	.799 20,3	.996 25,3	7	10-22-1072	1.398 35,5	1.594 40,5
5	10-22-1052	1.0 25,4	1.197 30,4	8	10-22-1082	1.598 40,6	1.795 45,6

5283-NA
Straight Pin Header

- 3-8 circuits
- Mates with 5198-N housing
- Same as 5279 but with second pin void





Inches
mm

PCB Layout

Ordering Information and Dimensions

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
3	10-63-1033	.599 15,2	.756 19,2	6	10-63-1063	1.197 30,4	1.354 34,4
4	10-63-1043	.799 20,3	.957 24,3	7	10-63-1073	1.398 35,5	1.555 39,5
5	10-63-1053	1.0 25,4	1.157 29,4	8	10-63-1083	1.598 40,6	1.756 44,6

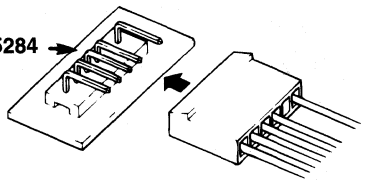
.200" 5,08mm Spox™ Header

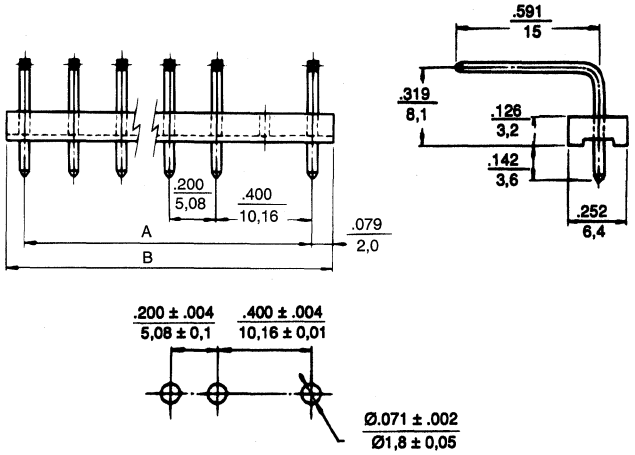
Available Primarily in the Far East

C

5284-NA
Right Angle Pin Header

- 3-8 circuits
- UL 94V-2 nylon 6/6
- .045" 1,14mm square pins
- Mates with 5198-N housing
- Tin plated brass pins
- Second pin void





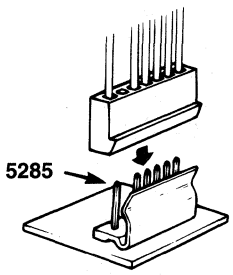
Inches / mm

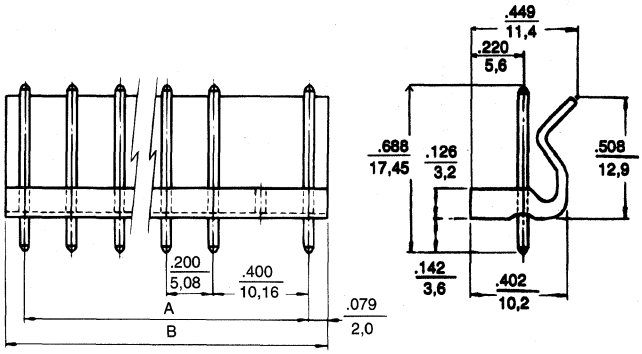
Ordering Information and Dimensions

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
3	10-68-1035	.599 15,2	.756 19,2	6	10-68-1065	1.197 30,4	1.354 34,4
4	10-68-1045	.799 20,3	.957 24,3	7	10-68-1075	1.398 35,5	1.555 39,5
5	10-68-1055	1.0 25,4	1.157 29,4	8	10-68-1085	1.598 40,6	1.756 44,6

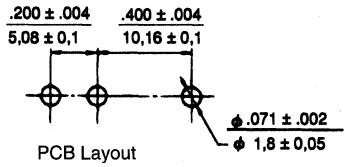
5285-NA
Straight Pin Friction Lock Header

- 3-8 circuits
- UL 94V-2 nylon 6/6
- .045" 1,14mm square pins
- Mates with 5198-N housing
- Tin plated brass pins
- Second pin void





Inches / mm



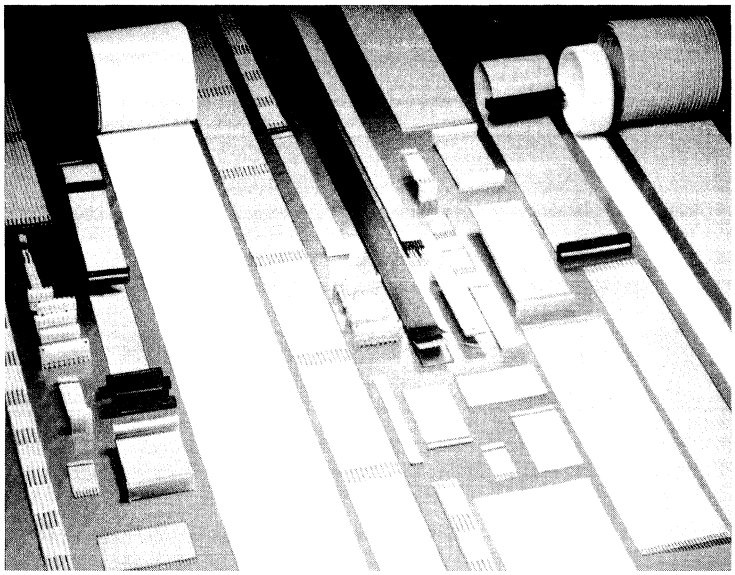
PCB Layout

Ordering Information and Dimensions

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
3	10-63-1039	.599 15,2	.756 19,2	6	10-63-1069	1.197 30,4	1.354 34,4
4	10-63-1049	.799 20,3	.957 24,3	7	10-63-1079	1.398 35,5	1.555 39,5
5	10-63-1059	1.0 25,4	1.157 29,4	8	10-63-1089	1.598 40,6	1.748 44,4

Cable & Cable Systems

Contents



.050" Round Conductor Flat Cable
6800, 8863, 40158 ..... 2D
- Gray PVC insulation
- Sizes up to 68 circuits
- U.L. Style 2651 (300V, 105°C., VW-1)

.100" Round Conductor Flat Cable 7234, 7307, 7560, 7767, 8996, 8997, 8867, 24241, 24226 ..... 3D-4D
- Gray PVC insulation
- Sizes up to 36 circuits
- U.L. Style 2651 (300V., 105°C., VW-1)

.100" Flextran™ High Flex Life Cable, 24369, 24389 ..... 5D
- Twenty times the flex life of standard 8997/8996 cable
- Sizes up to 36 circuits
- Special long life performance conductors

.100" Heavy Duty Composite 24327 ..... 6D
- Tough insulation resists cut/melt-through
- High flex life conductors
- Natural irradiated PVC/tan PVC insulation
- Sizes up to 24 circuits

.156" Round Conductor Flat Cable 7382, 7517, 8868, 40174 ..... 7D
- Gray PVC insulation
- Sizes up to 24 circuits
- U.L. Style 2651 (300V., 105°C., VW-1)

2.5mm Round Conductor Flat Cable 24490, 24491, 24492, 40160 ..... 8D
- Gray PVC insulation
- Sizes up to 30 circuits
- U.L. Style 2651 (300V., 105°C., VW-1)

2.0mm Round Conductor Flat Cable 24461, 24462, 24471, 24472 ..... 9D
- Gray PVC insulation
- Sizes up to 28 circuits
- U.L. Style 2651 (300V., 105°C., VW-1)

1.5mm Round Conductor Flat Cable 24483 ..... 10D
- Gray PVC insulation
- Sizes up to 15 circuits
- U.L. Style 2651 (300V., 105°C., VW-1)

Cable Assembly Capabilities and Pre-notched Cable 11D

Ribbon Cable Jumpers 12D

Flat Flex Cable Jumpers 13D

Electrical Specifications 14D

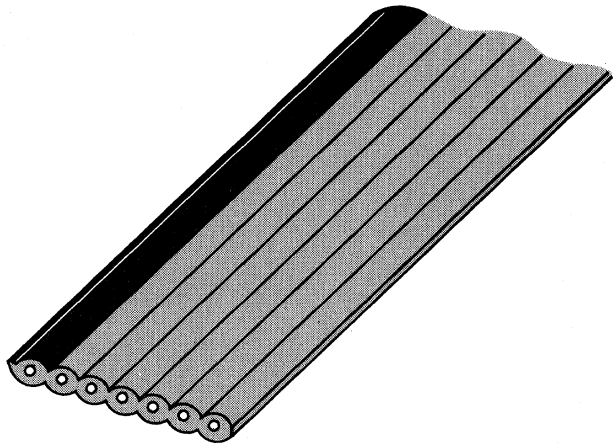
.050" (1,27 mm) Round Conductor Flat Cable

D

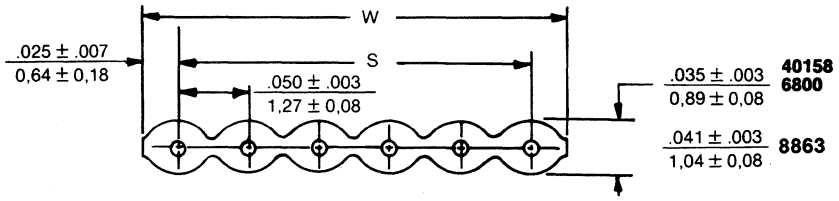
6800
28 AWG (7 x 36) Stranded, Tinned

8863
26 AWG (7 x 34) Stranded, Tinned

40158
28 AWG (7 x 36) Stranded, Topcoat



- □ Gray PVC insulation
- □ Sizes up to 68 circuits
- □ U.L. temperature rating −20°C to 105°C
- □ U.L. voltage rating 300 V max.
- □ U.L. flammability rating VW-1
- □ U.L. Style no. 2651
- □ U.L. recognized (File #E61522)
- □ CSA certification available (File #LL61126)



Dimensions

Circuits	Dim. S	Dim. W (Ref.)	Circuits	Dim. S	Dim. W (Ref.)	Circuits	Dim. S	Dim. W (Ref.)
9	.400 ± .007 10,16 ± 0,18	.450 11,43	25	1.200 ± .009 30,48 ± 0,23	1.250 31,75	40	1.950 ± .011 49,53 ± 0,28	2.000 50,80
10	.450 ± .007 11,43 ± 0,18	.500 12,70	26	1.250 ± .009 31,74 ± 0,23	1.300 33,02	50	2.450 ± .011 62,23 ± 0,28	2.500 63,50
14	.650 ± .007 16,51 ± 0,18	.700 17,78	34	1.650 ± .009 41,91 ± 0,23	1.700 43,18	60	2.950 ± .011 74,93 ± 0,28	3.000 76,20
15	.700 ± .007 17,78 ± 0,18	.750 19,05	36	1.750 ± .009 44.45 ± 0,23	1.800 45,72	64	3.150 ± .011 80,01 ± 0,28	3.200 81,28
16	.750 ± .009 19,05 ± 0,23	.800 20,32	37	1.800 ± .011 45,72 ± 0,28	1.850 46,99	68	3.350 ± .011 85,09 ± 0,28	3.400 86,36
20	.950 ± .009 24,13 ± 0,23	1.000 25,40						

See Page 14D for Electrical Specifications

Ordering Information

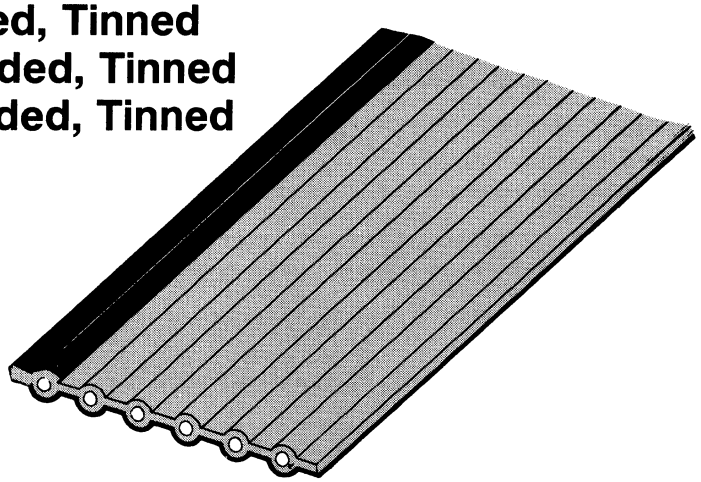
For Cable Series Number	Order Numbers		
	100 ft. Reel	300 ft. Reel	500 ft. Reel
6800-**XX**	• 82-28-57**XX**	• 82-28-59**XX**	• 82-28-54**XX**
8863-**XX**	• 82-26-68**XX**	• 82-26-72**XX**	• 82-26-80**XX**
40158-**XX**	• 82-28-55**XX**	• 82-28-53**XX**	• 82-28-56**XX**
Replace "**XX**" with number of circuits.			

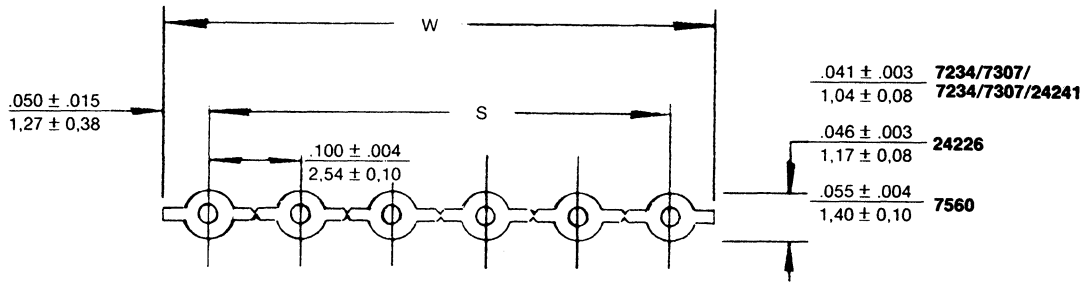
• U.S. Standard Product, available through Molex franchised distributors.

.100" (2,54 mm) Round Conductor Flat Cable

7234 26 AWG (1 x 26) Solid, Tinned
7307 28 AWG (7 x 36) Stranded, Tinned
7560 22 AWG (7 x 30) Stranded, Tinned
24241 26 AWG (7 x 34) Stranded, Tinned
24226 24 AWG (7 x 32) Stranded, Tinned

- □ Gray PVC insulation
- □ Sizes up to 36 circuits
- □ U.L. temperature rating −20°C to 105°C
- □ U.L. voltage rating 300 V. max.
- □ U.L. flammability rating VW-1
- □ U.L. Style No. 2651
- □ U.L. recognized (File #E61522)
- □ CSA Certification available (File #LL61126)





Dimensions

Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)
2	.100 ± .004 2,54 ± 0,10	.200 5,08	9	.800 ± .013 20,32 ± 0,33	.900 22,86	16	1.500 ± .013 38,10 ± 0,33	1.600 40,64	23	2.200 ± .013 55,58 ± 0,33	2.300 58,42	30	2.900 ± .013 73,66 ± 0,33	3.000 76,20
3	.200 ± .008 5,08 ± 0,20	.300 7.62	10	.900 ± .013 22,86 ± 0,33	1.000 25,40	17	1.600 ± .013 40,64 ± 0,33	1.700 43,18	24	2.300 ± .013 58,42 ± 0,33	2.400 60,96	31	3.000 ± .013 76,20 ± 0,33	3.100 78,74
4	.300 ± .012 7,62 ± 0,30	.400 10,16	11	1.000 ± .013 25,40 ± 0,33	1.100 27,94	18	1.700 ± .013 43,18 ± 0,33	1.800 45,72	25	2.400 ± .013 60,96 ± 0,33	2.500 63,50	32	3.100 ± .013 78,74 ± 0,33	3.200 81,28
5	.400 ± .013 10,16 ± 0,33	.500 12,70	12	1.100 ± .013 27,94 ± 0,33	1.200 30,48	19	1.800 ± .013 45,72 ± 0,33	1.900 48,26	26	2.500 ± .013 63,50 ± 0,33	2.600 66,04	33	3.200 ± .013 81,28 ± 0,33	3.300 83,82
6	.500 ± .013 12,70 ± 0,33	.600 15,24	13	1.200 ± .013 30,48 ± 0,33	1.300 33,02	20	1.900 ± .013 48,26 ± 0,33	2.000 50,80	27	2.600 ± .013 66,04 ± 0,33	2.700 66,58	34	3.300 ± .013 83,82 ± 0,33	3.400 86,36
7	.600 ± .013 15,24 ± 0,33	.700 17,78	14	1.300 ± .013 33,02 ± 0,33	1.400 35,56	21	2.000 ± .013 50,80 ± 0,33	2.100 53,34	28	2.700 ± .013 68,58 ± 0,33	2.800 71,12	35	3.400 ± .013 86,36 ± 0,33	3.500 88,90
8	.700 ± .013 17,78 ± 0,33	.800 20,32	15	1.400 ± .013 35,56 ± 0,33	1.500 38,10	22	2.100 ± .013 53,34 ± 0,33	2.200 55,88	29	2.800 ± .013 71,12 ± 0,33	2.900 73,66	36	3.500 ± .013 88,90 ± 0,33	3.600 91,44

See page 14D for Electrical Specifications.

Ordering Information

For Cable Series Number	Order Numbers		
	100 ft. Reel	300 ft. Reel	500 ft. Reel
7234-**XX**	• 82-26-57**XX**	• 82-26-59**XX**	• 82-26-66**XX**
7307-**XX**	• 82-28-58**XX**	• 82-28-6**XX**2	• 82-28-6**XX**5
7560-**XX**	• 82-22-61**XX**	• 82-22-62**XX**	• 82-22-71**XX**
24241-**XX**	• 82-26-56**XX**	• 82-26-53**XX**	• 82-26-75**XX**
24226-**XX**	• 82-24-77**XX**	• 82-24-73**XX**	• 82-24-55**XX**
Replace "**XX**" with number of circuits, 02-36			

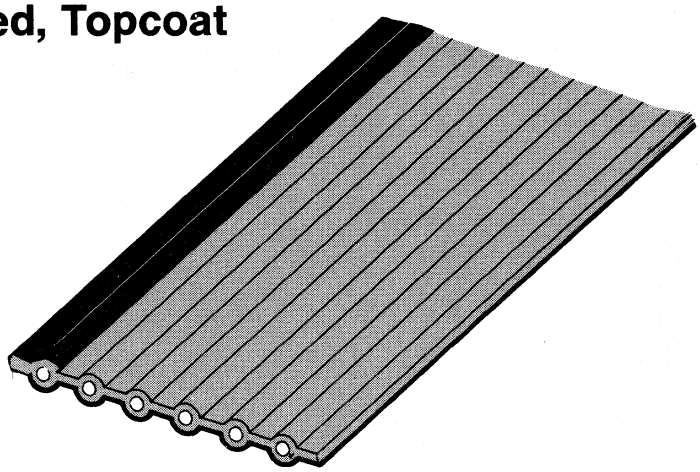
• U.S. Standard Product, available through Molex franchised distributors.

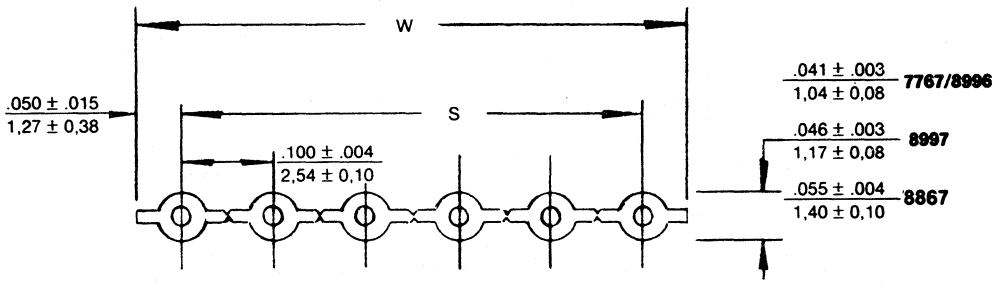
.100" (2,54 mm) Round Conductor Flat Cable

7767 28 AWG (7 x 36) Stranded, Topcoat
8996 26 AWG (7 x 34) Stranded, Topcoat
8997 24 AWG (7 x 32) Stranded, Topcoat
8867 22 AWG (7 x 30) Stranded, Topcoat

D

- Gray PVC insulation
- Sizes up to 36 circuits
- U.L. temperature rating −20°C to 105°C
- U.L. voltage rating 300 V. max.
- U.L. flammability rating VW-1
- U.L. Style No. 2651
- U.L. recognized (File #E61522)
- CSA certification available (File #LL61126)





Dimensions

Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)
2	.100 ± .004 2,54 ± 0,10	200 5,08	9	.800 ± .013 20,32 ± 0,33	.900 22,86	16	1.500 ± .013 38,10 ± 0,33	1.600 40,64	23	2.200 ± .013 55,88 ± 0,33	2.300 58,42	30	2.900 ± .013 73,66 ± 0,33	3.000 76,20
3	.200 ± .008 5,08 ± 0,20	.300 7,62	10	.900 ± .013 22,86 ± 0,33	1.000 25,40	17	1.600 ± .013 40,64 ± 0,33	1.700 43,18	24	2.300 ± 0.13 58,42 ± 0,33	2.400 60,96	31	3.000 ± .013 76,20 ± 0,33	3.100 78,74
4	.300 ± .012 7,62 ± 0,30	.400 10,16	11	1.000 ± .013 25,40 ± 0,33	1.100 27,94	18	1.700 ± .013 43,18 ± 0,33	1.800 45,72	25	2.400 ± .013 60,96 ± 0,33	2.500 63,50	32	3.100 ± .013 78,74 ± 0,33	3.200 81,28
5	.400 ± .013 10,16 ± 0,33	.500 12,70	12	1.100 ± .013 27,94 ± 0,33	1.200 30,48	19	1.800 ± .013 45,72 ± 0,33	1.900 48,26	26	2.500 ± .013 63,50 ± 0,33	2.600 66,04	33	3.200 ± .013 81,28 ± 0,33	3.300 83,82
6	.500 ± .013 12,70 ± 0,33	.600 15,24	13	1.200 ± .013 30,48 ± 0,33	1.300 33,02	20	1.900 ± .013 48,26 ± 0,33	2.000 50,80	27	2.600 ± .013 66,04 ± 0,33	2.700 68,58	34	3.300 ± .013 83,82 ± 0,33	3.400 86,36
7	.600 ± .013 15,24 ± 0,33	.700 17,78	14	1.300 ± .013 33,02 ± 0,33	1.400 35,56	21	2.000 ± .013 50,80 ± 0,33	2.100 53,34	28	2.700 ± .013 68,58 ± 0,33	2.800 71,12	35	3.400 ± .013 86,36 ± 0,33	3.500 88,90
8	.700 ± .013 17,78 ± 0,33	.800 20,32	15	1.400 ± .013 35,56 ± 0,33	1.500 38,10	22	2.100 ± .013 53,34 ± 0,33	2.200 55,88	29	2.800 ± .013 71,12 ± 0,33	2.900 73,66	36	3.500 ± .013 88,90 ± 0,33	3.600 91,44

See Page 14D for Electrical Specifications

Ordering Information

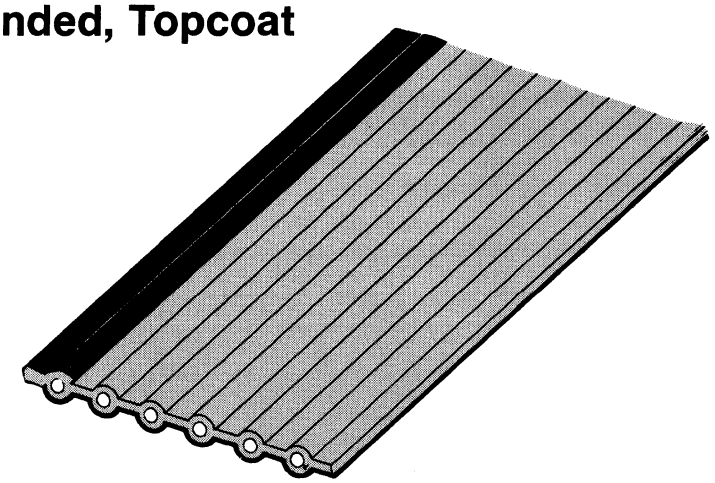
For Cable Series Number	Order Numbers		
	100 ft. Reel	300 ft. Reel	500 ft. Reel
7767-**XX**	• 82-28-6**XX**1	• 82-28-6**XX**3	• 82-28-6**XX**8
8996-**XX**	• 82-26-58**XX**	• 82-26-71**XX**	• 82-26-76**XX**
8997-**XX**	• 82-24-59**XX**	• 82-24-60**XX**	• 82-24-65**XX**
8867-**XX**	• 82-22-60**XX**	• 82-22-65**XX**	• 82-22-74**XX**
Replace "**XX**" with number of circuits, 02-36			

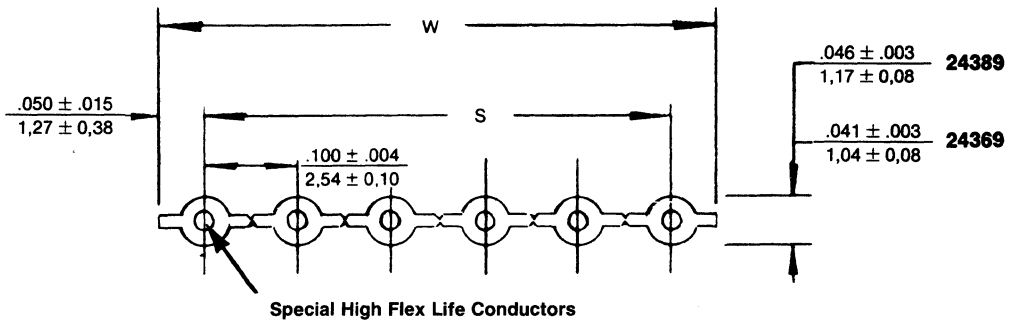
• U.S. Standard Product, available through Molex franchised distributors.

.100" (2,54mm) Flextran™ High Flex Life Cable

24369 26 AWG (19 x 38) Stranded, Topcoat
24389 24 AWG (19 x 36) Stranded, Topcoat

- 20 times the flex life of our standard 8997/8996 cable (per ASTM B470)
- Special high performance conductors
- Gray PVC insulation
- Sizes up to 36 circuits
- U.L. temperature rating −20°C to 105°C
- U.L. voltage rating 300 V. max.
- U.L. flammability rating VW-1
- U.L. Style No. 2651
- U.L. recognized (File #E61522)





Special High Flex Life Conductors

Dimensions

Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)
2	.100 ± .004 2,54 ± 0,10	.200 5,08	9	.800 ± .013 20,32 ± 0,33	.900 22,86	16	1.500 ± .013 38,10 ± 0,33	1.600 40,64	23	2.200 ± .013 55,88 ± 0,33	2.300 58,42	30	2.900 ± .013 73,66 ± 0,33	3.000 76,20
3	.200 ± .008 5,08 ± 0,20	.300 7,62	10	.900 ± .013 22,86 ± 0,33	1.000 25,40	17	1.600 ± .013 40,64 ± 0,33	1.700 43,18	24	2.300 ± .013 58,42 ± 0,33	2.400 60,96	31	3.000 ± .013 76,20 ± 0,33	3.100 78,74
4	.300 ± .012 7,62 ± 0,30	.400 10,16	11	1.000 ± .013 25,40 ± 0,33	1.100 27,94	18	1.700 ± .013 43,18 ± 0,33	1.800 45,72	25	2.400 ± .013 60,96 ± 0,33	2.500 63,50	32	3.100 ± .013 78,74 ± 0,33	3.200 81,28
5	.400 ± .013 10,16 ± 0,33	.500 12,70	12	1.100 ± .013 27,94 ± 0,33	1.200 30,48	19	1.800 ± .013 45,72 ± 0,33	1.900 48,26	26	2.500 ± .013 63,50 ± 0,33	2.600 66,04	33	3.200 ± .013 81,28 ± 0,33	3.300 83,82
6	.500 ± .013 12,70 ± 0,33	.600 15,24	13	1.200 ± .013 30,48 ± 0,33	1.300 33,02	20	1.900 ± .013 48,26 ± 0,33	2.000 50,80	27	2.600 ± .013 66,04 ± 0,33	2.700 68,58	34	3.300 ± .013 83,82 ± 0,33	3.400 86,36
7	.600 ± .013 15,24 ± 0,33	.700 17,78	14	1.300 ± .013 33,02 ± 0,33	1.400 35,56	21	2.000 ± .013 50,80 ± 0,33	2.100 53,34	28	2.700 ± .013 68,58 ± 0,33	2.800 71,12	35	3.400 ± .013 86,36 ± 0,33	3.500 88,90
8	.700 ± .013 17,78 ± 0,33	.800 20,32	15	1.400 ± .013 35,56 ± 0,33	1.500 38,10	22	2.100 ± .013 53,34 ± 0,33	2.200 55,88	29	2.800 ± .013 71,12 ± 0,33	2.900 73,66	36	3.500 ± .013 88,90 ± 0,33	3.600 91,44

See Page 14D for Electrical Specifications

Ordering Information

For Cable Series Number	Order Numbers		
	100 Ft. Reel	300 Ft. Reel	500 Ft. Reel
24369-**XX**	• 82-26-62**XX**	• 82-26-60**XX**	• 82-26-65**XX**
24389-**XX**	• 82-24-80**XX**	• 82-24-81**XX**	• 82-24-82**XX**
Replace "**XX**" with number of circuits, 02-36			

• U.S. Standard Product, available through Molex franchised distributors.

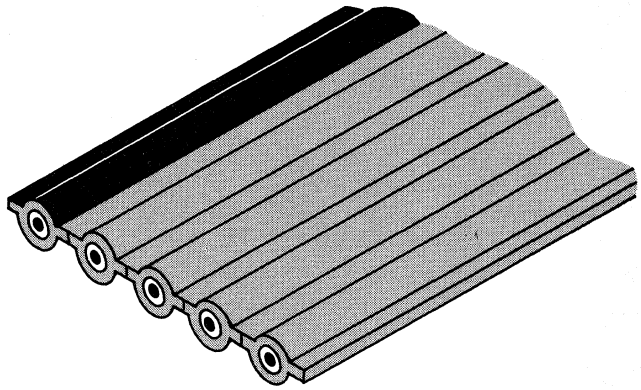
.100" (2,54 mm) Heavy Duty Composite Cable

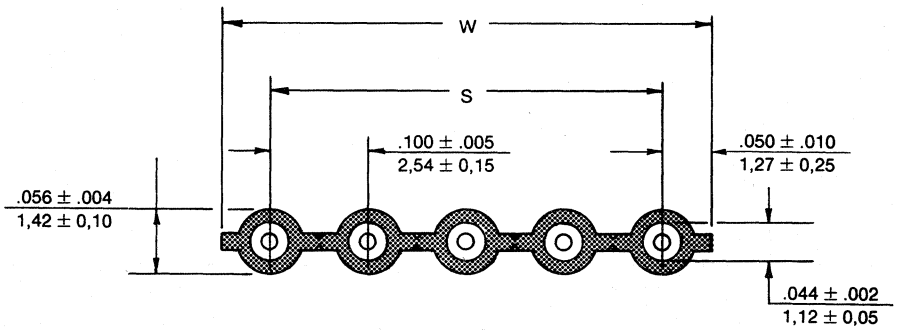
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24327

24 AWG (19 x 36) Stranded, Overcoat Pre-Insulated

- Tough primary insulation resists cut/melt-through
- High flex life conductors
- Natural irradiated PVC primary/tan PVC secondary insulation
- Sizes up to 24 circuits





Dimensions

Circuits	Dim. S	Dim. W (Ref.)	Circuits	Dim. S	Dim. W (Ref.)	Circuits	Dim. S	Dim. W (Ref.)
2	.100 ± .004 2,54 ± 0,10	.200 5,08	10	.900 ± .013 22,86 ± 0,33	1.000 25,40	18	1.700 ± .013 43,18 ± 0,33	1.800 45,72
3	.200 ± .008 5,08 ± 0,20	.300 7,62	11	1.000 ± .013 25,40 ± 0,33	1.100 27,94	19	1.800 ± .013 45,72 ± 0,33	1.900 48,26
4	.300 ± .012 7,62 ± 0,30	.400 10,16	12	1.100 ± .013 27,94 ± 0,33	1.200 30,48	20	1.900 ± .013 48,26 ± 0,33	2.000 50,80
5	.400 ± .013 10,16 ± 0,33	.500 12,70	13	1.200 ± .013 30,48 ± 0,33	1.300 33,02	21	2.000 ± .013 50,80 ± 0,33	2.100 53,34
6	.500 ± .013 12,70 ± 0,33	.600 15,24	14	1.300 ± .013 33,02 ± 0,33	1.400 35,56	22	2.100 ± .013 53,34 ± 0,33	2.200 55,88
7	.600 ± .013 15,24 ± 0,33	.700 17,78	15	1.400 ± .013 35,56 ± 0,33	1.500 38,10	23	2.200 ± .013 55,88 ± 0,33	2.300 58,42
8	.700 ± .013 17,78 ± 0,33	.800 20,32	16	1.500 ± .013 38,10 ± 0,33	1.600 40,64	24	2.300 ± .013 58,42 ± 0,33	2.400 60,96
9	.800 ± .013 20,32 ± 0,33	.900 22,86	17	1.600 ± .013 40,64 ± 0,33	1.700 43,18			

See Page 14D for Electrical Specifications

Ordering Information

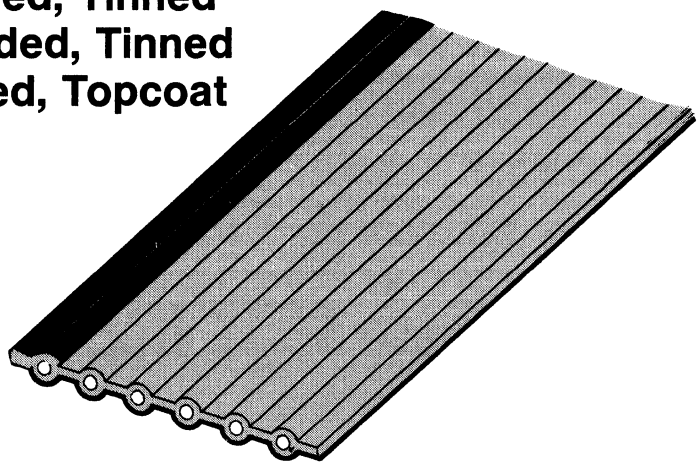
For Cable Series Number	Order Number		
	100 Ft. Reel	300 Ft. Reel	500 Ft. Reel
24327-**XX**	• 82-24-84**XX**	• 82-24-79**XX**	• 82-24-75**XX**
Replace "**XX**" with number of circuits, 02-24			

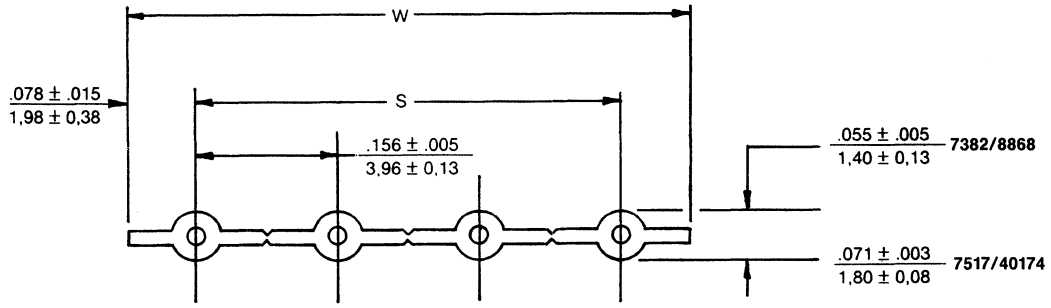
• U.S. Standard Product, available through Molex franchised distributors.

.156" (3,96 mm) Round Conductor Flat Cable

7382 22 AWG (7 x 30) Stranded, Tinned
7517 18 AWG (19 x 30) Stranded, Tinned
40174 18 AWG (7 x 26) Stranded, Tinned
8868 22 AWG (7 x 30) Stranded, Topcoat

- Gray PVC insulation
- Sizes up to 24 circuits
- U.L. temperature rating −20°C to 105°C
- U.L. voltage rating 300 V. max.
- U.L. flammability rating VW-1
- U.L. Style No. 2651
- U.L. recognized (File #E61522)
- CSA certification available (File #LL61126)





D

Dimensions

Circuits	Dim. S	Dim. W (Ref.)	Circuits	Dim. S	Dim. W (Ref.)	Circuits	Dim. S	Dim. W (Ref.)
2	.156 ± .005 3,96 ± 0,13	.312 7,93	10	1.404 ± .015 35,66 ± 0,38	1.560 39,62	18	2.652 ± .015 67,36 ± 0,38	2.808 71,32
3	.312 ± .010 7,93 ± 0,25	.468 11,89	11	1.560 ± .015 39,62 ± 0,38	1.716 43,59	19	2.808 ± .015 71,32 ± 0,38	2.964 75,29
4	.468 ± .015 11,89 ± 0,38	.624 15,85	12	1.716 ± .015 43,59 ± 0,38	1.872 47,55	20	2.964 ± .015 75,29 ± 0,38	3.120 79,25
5	.624 ± .015 15,85 ± 0,38	.780 19,81	13	1.872 ± .015 47,55 ± 0,38	2.028 51,51	21	3.120 ± .015 79,25 ± 0,38	3.276 83,21
6	.780 ± .015 19,81 ± 0,38	.936 23,77	14	2.028 ± .015 51,51 ± 0,38	2.184 55,47	22	3.276 ± .015 83,21 ± 0,38	3.432 87,17
7	.936 ± .015 23,77 ± 0,38	1.092 27,74	15	2.184 ± .015 55,47 ± 0,38	2.340 59,44	23	3.432 ± .015 87,17 ± 0,38	3.588 91,14
8	1.092 ± .015 27,74 ± 0,38	1.248 31,70	16	2.340 ± .015 59,44 ± 0,38	2.496 63,40	24	3.588 ± .015 91,14 ± 0,38	3.744 95,10
9	1.248 ± .015 31,70 ± 0,38	1.404 35,56	17	2.496 ± .015 63,40 ± 0,38	2.652 67,36			

See Page 14D for Electrical Specifications

Ordering Information

For Cable Series Number	Order Numbers		
	100 Ft. Reel	300 Ft. Reel	500 Ft. Reel
7382-**XX**	• 82-22-58**XX**	• 82-22-63**XX**	• 82-22-73**XX**
7517-**XX**	• 82-18-5**XX**1	• 82-18-5**XX**2	• 82-18-5**XX**3
40174-**XX**	• 82-18-60**XX**	• 82-18-61**XX**	• 82-18-62**XX**
8868-**XX**	• 82-22-59**XX**	• 82-22-67**XX**	• 82-22-68**XX**
Replace "**XX**" with number of circuits, 02-24			

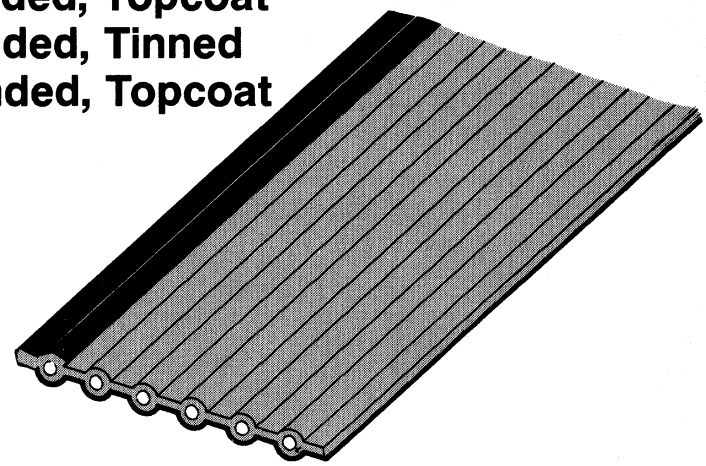
• U.S. Standard Product, available through Molex franchised distributors.

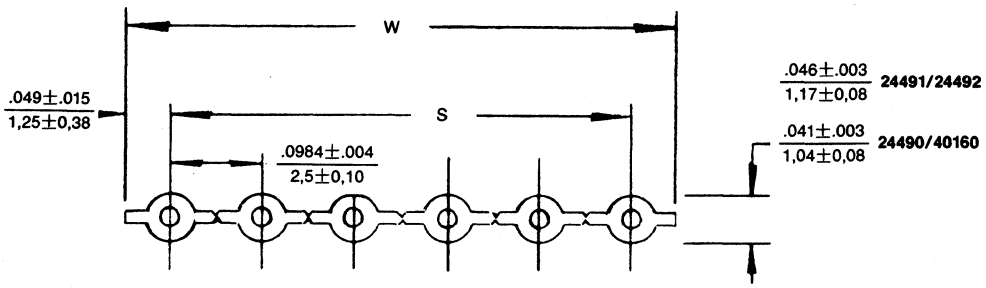
2.5 mm (.098") Round Conductor Flat Cable

24491 24 AWG (7 x 32) Stranded, Tinned
24492 24 AWG (7 x 32) Stranded, Topcoat
24490 26 AWG (7 x 34) Stranded, Tinned
40160 26 AWG (7 x 34) Stranded, Topcoat

D

- Gray PVC insulation
- Sizes up to 30 circuits
- U.L. temperature rating −20°C to 105°C
- U.L. voltage rating 300 V. max.
- U.L. flammability rating VW-1
- U.L. Style No. 2651
- U.L. recognized (File #E61522)
- CSA Certification available (File #LL61126)





Dimensions

Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)
2	.098 ± .004 2,50 ± 0,10	.197 5,00	8	.689 ± .013 17,50 ± 0,33	.787 20,00	14	1.280 ± .013 32,50 ± 0,33	1.378 35,00	20	1.870 ± .013 47,50 ± 0,33	1.968 50,00	26	2.461 ± .013 62,50 ± 0,33	2.559 65,00
3	.197 ± .008 5,00 ± 0,20	.295 7,50	9	.787 ± .013 20,00 ± 0,33	.886 22,50	15	1.378 ± .013 35,00 ± 0,33	1.476 37,50	21	1.968 ± .013 50,00 ± 0,33	2.067 52,50	27	2.559 ± .013 65,00 ± 0,33	2.657 67,50
4	.295 ± .012 7,50 ± 0,30	.394 10,00	10	.886 ± .013 22,50 ± 0,33	.984 25,00	16	1.476 ± .013 37,50 ± 0,33	1.575 40,00	22	2.067 ± .013 52,50 ± 0,33	2.165 55,00	28	2.657 ± .013 67,50 ± 0,33	2.756 70,00
5	.394 ± .013 10,00 ± 0,33	.492 12,50	11	.984 ± .013 25,00 ± 0,33	1.083 27,50	17	1.575 ± .013 40,00 ± 0,33	1.673 42,50	23	2.165 ± .013 55,00 ± 0,33	2.264 57,50	29	2.756 ± .013 70,00 ± 0,33	2.854 72,50
6	.492 ± .013 12,50 ± 0,33	.591 15,00	12	1.083 ± .013 27,50 ± 0,33	1.181 30,00	18	1.673 ± .013 42,50 ± 0,33	1.772 45,00	24	2.264 ± .013 57,50 ± 0,33	2.362 60,00	30	2.854 ± .013 72,50 ± 0,33	2.953 75,00
7	.591 ± .013 15,00 ± 0,33	.689 17,50	13	1.181 ± .013 30,00 ± 0,33	1.280 32,50	19	1.772 ± .013 45,00 ± 0,33	1.870 47,50	25	2.362 ± .013 60,00 ± 0,33	2.461 62,50			

See Page 14D for Electrical Specifications

Ordering Information

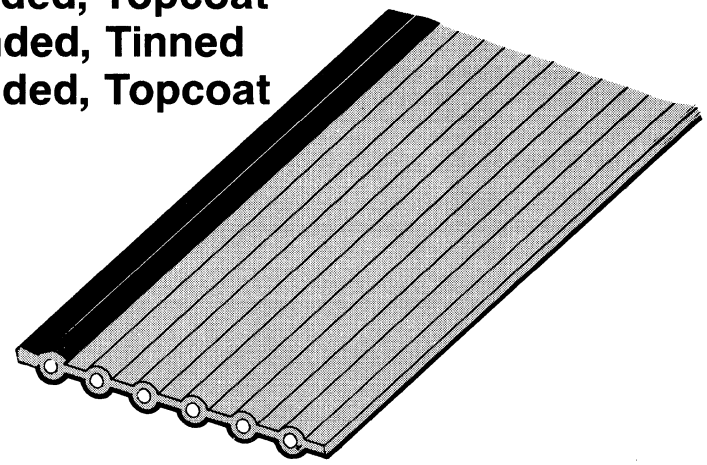
For Cable Series Number	Order Numbers		
	100 Ft. Reel	300 Ft. Reel	500 Ft. Reel
24491-**XX**	• 82-24-50**XX**	• 82-24-51**XX**	• 82-24-52**XX**
24492-**XX**	• 82-24-85**XX**	• 82-24-86**XX**	• 82-24-87**XX**
24490-**XX**	• 82-26-35**XX**	• 82-26-36**XX**	• 82-26-37**XX**
40160-**XX**	• 82-26-55**XX**	• 82-26-81**XX**	• 82-26-82**XX**
Replace "**XX**" with number of circuits, 02-30			

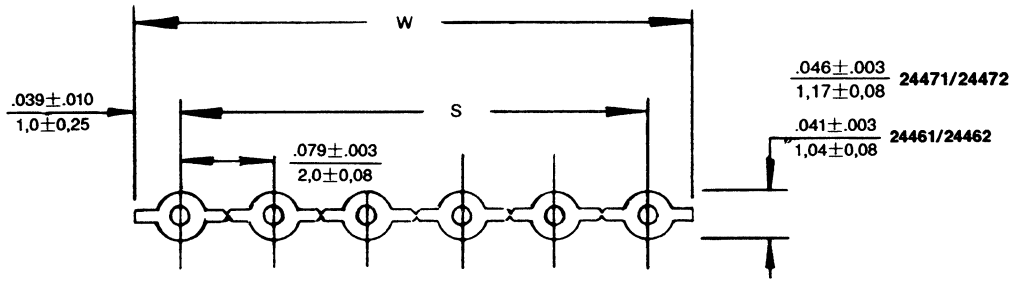
• U.S. Standard Product, available through Molex franchised distributors.

2.0 mm (.079") Round Conductor Flat Cable

24471 24 AWG (7 x 32) Stranded, Tinned
24472 24 AWG (7 x 32) Stranded, Topcoat
24461 26 AWG (7 x 34) Stranded, Tinned
24462 26 AWG (7 x 34) Stranded, Topcoat

- Gray PVC insulation
- Sizes up to 28 circuits
- U.L. temperature rating −20°C to 105°C
- U.L. voltage rating 300 V. max.
- U.L. flammability rating VW-1
- U.L. Style No. 2651
- U.L. recognized (File #E61522)
- CSA Certification available (File #LL61126)





Dimensions

Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)
2	.079 ± .003 2,00 ± 0,08	.157 4,00	8	.551 ± .011 14,00 ± 0,28	.630 16,00	14	1.024 ± .011 26,00 ± 0,28	1.102 28,00	20	1.496 ± .011 38,00 ± 0,28	1.575 40,00	26	1.969 ± .011 50,00 ± 0,28	2.047 52,00
3	.157 ± .006 4,00 ± 0,15	.236 6,00	9	.630 ± .011 16,00 ± 0,28	.709 18,00	15	1.102 ± .011 28,00 ± 0,28	1.181 30,00	21	1.575 ± .011 40,00 ± 0,28	1.654 42,00	27	2.047 ± .011 52,00 ± 0,28	2.126 54,00
4	.236 ± .009 6,00 ± 0,23	.315 8,00	10	.709 ± .011 18,00 ± 0,28	.787 20,00	16	1.181 ± .011 30,00 ± 0,28	1.260 32,00	22	1.654 ± .011 42,00 ± 0,28	1.732 44,00	28	2.126 ± .011 54,00 ± 0,28	2.205 56,00
5	.315 ± .011 8,00 ± 0,28	.394 10,00	11	.787 ± .011 20,00 ± 0,28	.866 22,00	17	1.260 ± .011 32,00 ± 0,28	1.339 34,00	23	1.732 ± .011 44,00 ± 0,28	1.811 46,00			
6	.394 ± .011 10,00 ± 0,28	.472 12,00	12	.866 ± .011 22,00 ± 0,28	.945 24,00	18	1.339 ± .011 34,00 ± 0,28	1.417 36,00	24	1.811 ± .011 46,00 ± 0,28	1.890 48,00			
7	.472 ± .011 12,00 ± 0,28	.551 14,00	13	.945 ± .011 24,00 ± 0,28	1.024 26,00	19	1.417 ± .011 36,00 ± 0,28	1.496 38,00	25	1.890 ± .011 48,00 ± 0,28	1.969 50,00			

See Page 14D for Electrical Specifications

Ordering Information

For Cable Series Number	Order Numbers		
	100 Ft. Reel	300 Ft. Reel	500 Ft. Reel
24471-**XX**	• 82-24-41**XX**	• 82-24-42**XX**	• 82-24-43**XX**
24472-**XX**	• 82-24-44**XX**	• 82-24-45**XX**	• 82-24-46**XX**
24461-**XX**	• 82-26-41**XX**	• 82-26-42**XX**	• 82-26-43**XX**
24462-**XX**	• 82-26-44**XX**	• 82-26-45**XX**	• 82-26-46**XX**
Replace "**XX**" with number of circuits, 02-28			

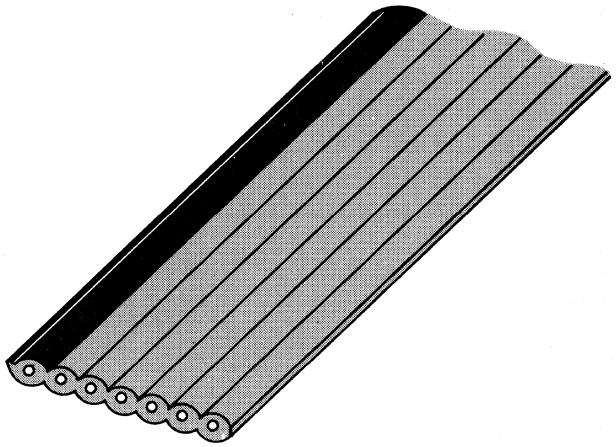
• U.S. Standard Product, available through Molex franchised distributors.

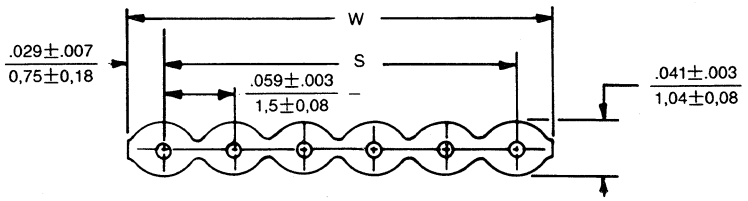
1.5 mm (.059") Round Conductor Flat Cable

24483 26 AWG (7 x 34) Stranded, Topcoat

- □ Gray PVC insulation
- □ Sizes up to 30 circuits, Contact Factory for circuit sizes 16-30
- □ U.L. temperature rating −20°C to 105°C
- □ U.L. voltage rating 300 V. max.
- □ U.L. flammability rating VW-1
- □ U.L. Style No. 2651
- □ U.L. recognized (File #E61522)
- □ CSA Certification available (File #LL61126)

D





Dimensions

Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)
4	.177 ± .007 4,50 ± 0,18	.236 6,00	7	.354 ± .007 9,00 ± 0,18	.413 10,50	10	.531 ± .007 13,50 ± 0,18	.590 15,00	13	.708 ± .007 18,00 ± 0,18	.767 19,50
5	.236 ± .007 6,00 ± 0,18	.295 7,50	8	.413 ± .007 10,50 ± 0,18	.472 12,00	11	.590 ± .007 15,00 ± 0,18	.649 16,50	14	.767 ± .007 19,50 ± 0,18	.826 21,00
6	.295 ± .007 7,50 ± 0,18	.354 9,00	9	.472 ± .007 12,00 ± 0,18	.531 13,50	12	.649 ± .007 16,50 ± 0,18	.708 18,00	15	.826 ± .007 21,00 ± 0,18	.885 22,50

See Page 14D for Electrical Specifications

Ordering Information

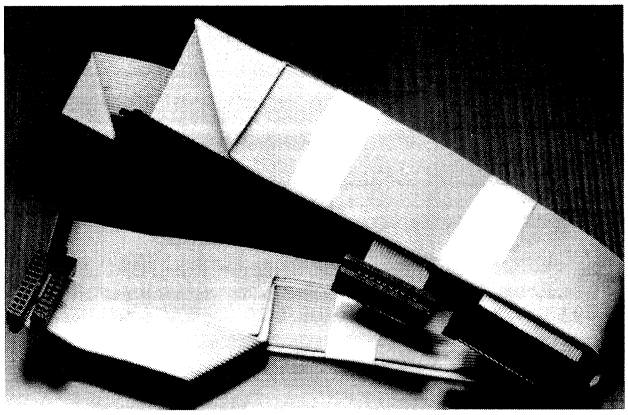
For Cable Series Number	Order Numbers		
	100 Ft. Reel	300 Ft. Reel	500 Ft. Reel
24483-**XX**	• 82-26-38**XX**	• 82-26-40**XX**	• 82-26-39**XX**
Replace "**XX**" with number of circuits, 04-15			

• U.S. Standard Product, available through Molex franchised distributors.

Cable Assemblies

Molex offers a variety of standard and custom cable and discrete wire assemblies at industry-competitive prices.

- ☐ Quality assurance guaranteed
- ☐ Samples available
- ☐ Production quantities in 4-6 weeks
- ☐ We provide finished assemblies or components and equipment for you to complete your own assemblies.
- ☐ SPC and EDT used in all cable facilities

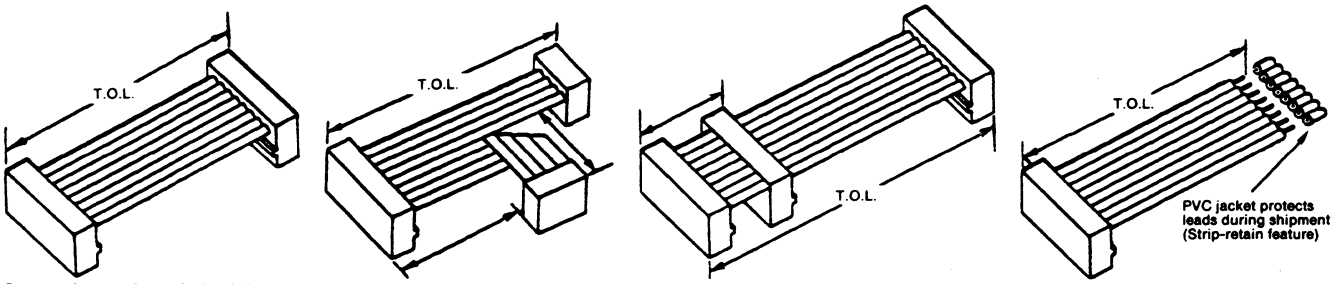


D

Features

- ☐ Single- or Double-ended assemblies
- ☐ Daisy chain assemblies
- ☐ Right angle or in-line IDT
- ☐ Variety of center spacings

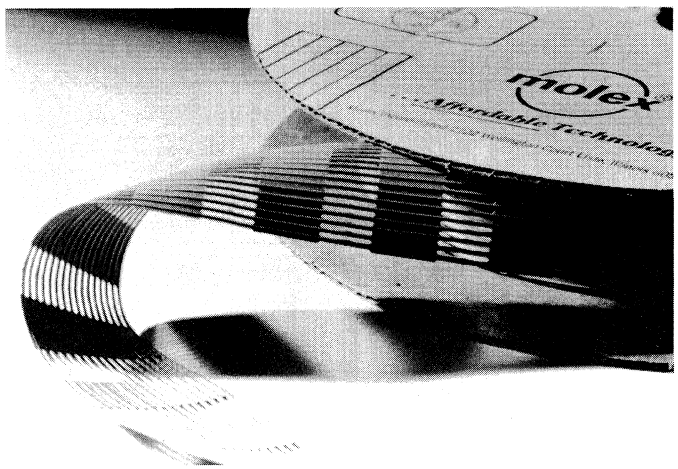
.050″	2.5mm
.100″	2.0mm
.156″	1.5mm



Contact factory for ordering information.

Pre-Notched Cable

Molex offers cable pre-notched for connector termination. Pre-notched cable offers the benefits of jumpers or bulk cable without the expense of notching equipment. Molex pre-notched cable is available on 100 and 300 ft. reels.



• Notched cable is available through Molex franchised U.S. distributors.

Ribbon Cable Jumpers

A practical and cost effective method of board-to-board interconnection – not requiring a disconnect is the Molex PVC cable jumper system. Our jumpers utilize solid or topcoated conductors in a variety of spacings with a strip and retain feature that protects the wire leads during shipment and handling.

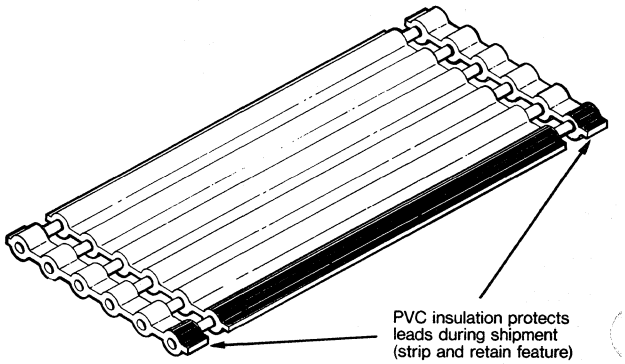
Molex has recognized the need for a system to design, quote and produce cable jumpers quickly. Our 28XXX system provides immediate quotations and the shortest leadtimes possible!

D

Specifications Cable Spacings	Circuit Sizes
.050″ (1,27mm)	10-50
.100″ (2,54mm)	3-30
.156″ (3,96mm)	2-24
2.5mm (.098″)	3-30
2.0mm (.079″)	4-28
1.5mm (.059″)	6-15

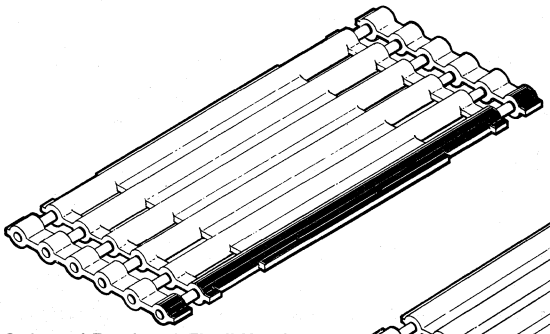
Minimum overall length 1.0″ (no maximum)

Variable strip and retain dimensions between 3.0mm (.118″) and 8.0mm (.315″)

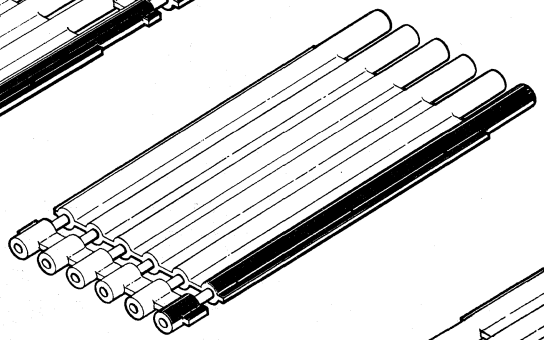


• Cable jumpers are available through Molex franchised U.S. Distributors.

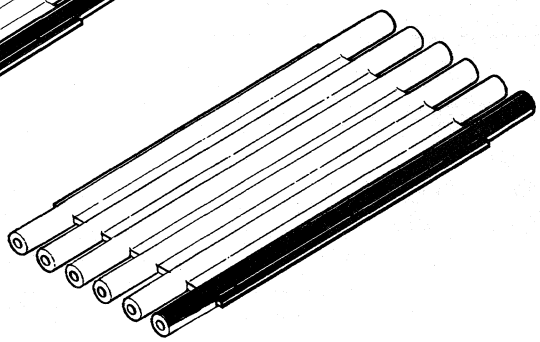
Other features on 28XXX cable jumpers include end notching for IDT termination, intermittent notching and slits for increased flexibility.



Strip and Retain w/"Flex" Notches



Strip and Retain w/End Notch for IDT

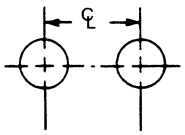


Notched Both Ends for IDT

Contact Factory with the following information:

- Wire Type
- Centerline Spacing
- Circuit Size
- Lengths

Recommended P.C. Board Hole Diameter

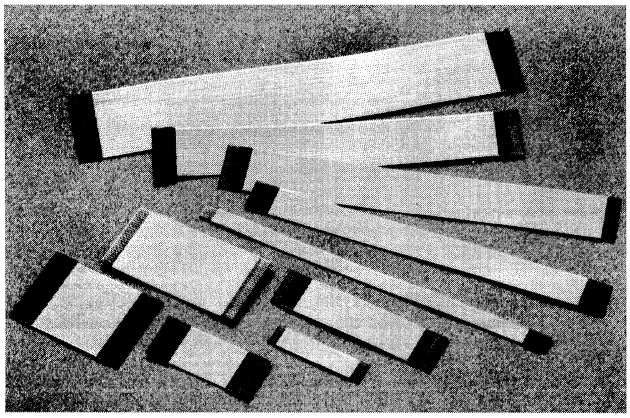


* Hole Diameter

Wire Gauge (Stranded, T/C)	Recommended Hole Dia. *	
	Inches (mm)	Tolerance
28	.031 0,75	± .003 0,08
26	.032 0,8	± .003 0,08
24	.037 0,95	± .004 0,1
22	.043 1,1	± .004 0,1

Flat Flex Cable Jumpers

When disconnects are required and size is critical, Molex Flat Flex Cable (FFC) Jumpers used with Molex ZIF and LIF Connectors provide an easy to use solution! Molex FFC Jumpers are available in 1.0mm and 1.25mm centerline spacings.



Durability Testing:

Number of Conductors: 6 - 30 on 1.0mm center (even numbers only)
5 - 40 on 1.25mm center

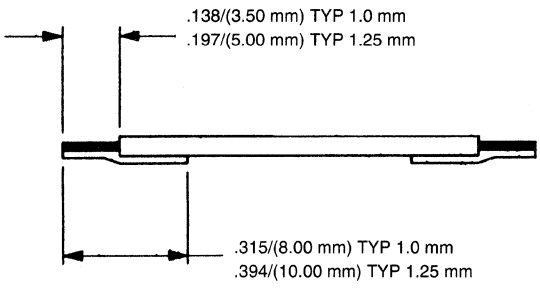
Minimum Length: 40mm

L STYLE

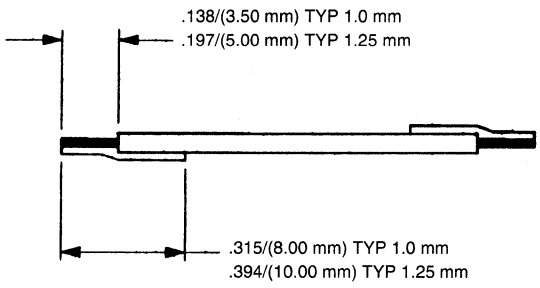
UL Style No. 2896
Temperature Rating: -40°C to +80°C
Voltage Rating: 30 volts

H STYLE

UL Style No. 2690, 2643,
2737, 20556
Temperature Rating: -40°C to +105°C
Voltage Rating: 300 volts



Type "A"



Type "D"

Ordering Information

Each application for an FFC cable jumper is unique. Please contact the factory for custom part numbers and ordering information.

See section L of this catalog for information on Molex ZIF and LIF Connectors.

Electrical Specifications

Round Conductor Flat Cable

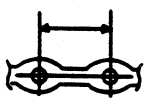
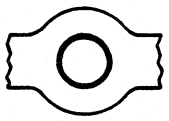
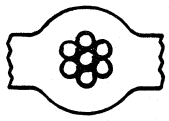
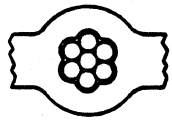
℄ Spacing	Cable Series	AWG	Copper Conductor Type	Max. Cond. Resistance (mΩ/Ft.)	Nom. Characteristic Impedance (Ω)		Nom. Capacitance (pF/Ft.)		Nom. Prop. Delay (ns./Ft.)	Min. Dielectric Withstanding Voltage (VRMS)	Page No.
					GS	GSG	GS	GSG			
1.5 mm	24483	26	Stranded Topcoat (7 x 34)	43	121	99	9.0	16.5	1.4	2000	11D
.050	6800	28	Stranded Tinned (7 x 36)	68	123	100	9.1	17.0	1.4	2000	2D
	8863	26	Stranded Tinned (7 x 34)	43	115	93	8.9	18.0	1.4	2000	
	40158	28	Stranded Topcoat (7 x 36)	68	123	100	9.1	17.0	1.4	2000	
2.0 mm	24461	26	Stranded Tinned (7 x 34)	43	133	111	7.3	13.4	1.4	2000	10D
	24462	26	Stranded Topcoat (7 x 34)	43	133	111	7.3	13.4	1.4	2000	
	24471	24	Stranded Tinned (7 x 32)	27	124	104	8.2	14.6	1.4	2000	
	24472	24	Stranded Topcoat (7 x 32)	27	124	104	8.2	14.6	1.4	2000	
2.5 mm	24490	26	Stranded Tinned (7 x 34)	43	143	121	5.7	10.4	1.4	2000	9D
	40160	26	Stranded Topcoat (7 x 34)	43	143	121	5.7	10.4	1.4	2000	
	24491	24	Stranded Tinned (7 x 32)	27	133	113	6.6	11.8	1.4	2000	
	24492	24	Stranded Topcoat (7 x 32)	27	133	113	6.6	11.8	1.4	2000	
.100	7234	26	Solid Tinned (1 x 26)	45	150	128	5.2	9.2	1.4	2000	4D & 5D
	7307	28	Stranded Tinned (7 x 36)	68	150	128	5.0	9.1	1.4	2000	
	7560	22	Stranded Tinned (7 x 30)	17	128	104	7.2	13.4	1.4	2000	
	7767	28	Stranded Topcoat (7 x 36)	68	150	128	5.0	9.1	1.4	2000	
	8996	26	Stranded Topcoat (7 x 34)	43	145	123	5.6	10.3	1.4	2000	
	8997	24	Stranded Topcoat (7 x 32)	27	134	114	6.6	12.0	1.4	2000	
	8867	22	Stranded Topcoat (7 x 30)	17	128	104	7.2	13.4	1.4	2000	
	24241	26	Stranded Tinned (7 x 34)	43	145	123	5.6	10.3	1.4	2000	
	24226	24	Stranded Tinned (7 x 32)	27	134	114	6.6	12.0	1.4	2000	
.156	7382	22	Stranded Tinned (7 x 30)	17	140	123	4.7	8.5	1.4	2000	8D
	7517	18	Stranded Tinned (19 x 30)	7	128	105	5.9	10.9	1.4	2000	
	8868	22	Stranded Topcoat (7 x 30)	17	140	123	4.7	8.5	1.4	2000	
	40174	18	Stranded Tinned (7 x 26)	7	128	105	5.9	10.9	1.4	2000	

Flextran (High Flex Life Cable)

℄ Spacing	Cable Series	AWG	Copper Conductor Type	Max. Cond. Resistance (mΩ/Ft.)	Nom. Characteristic Impedance (Ω)		Nom. Capacitance (pF/Ft.)		Nom. Prop. Delay (ns./Ft.)	Min. Dielectric Withstanding Voltage (VRMS)	Page No.
					GS	GSG	GS	GSG			
.100	24369	26	Stranded Topcoat (19 x 38)	54	158	131	5.3	9.2	1.4	2000	6D
	24389	24	Stranded Topcoat (19 x 36)	34	146	122	6.2	10.7	1.4	2000	

Heavy Duty Composite Cable

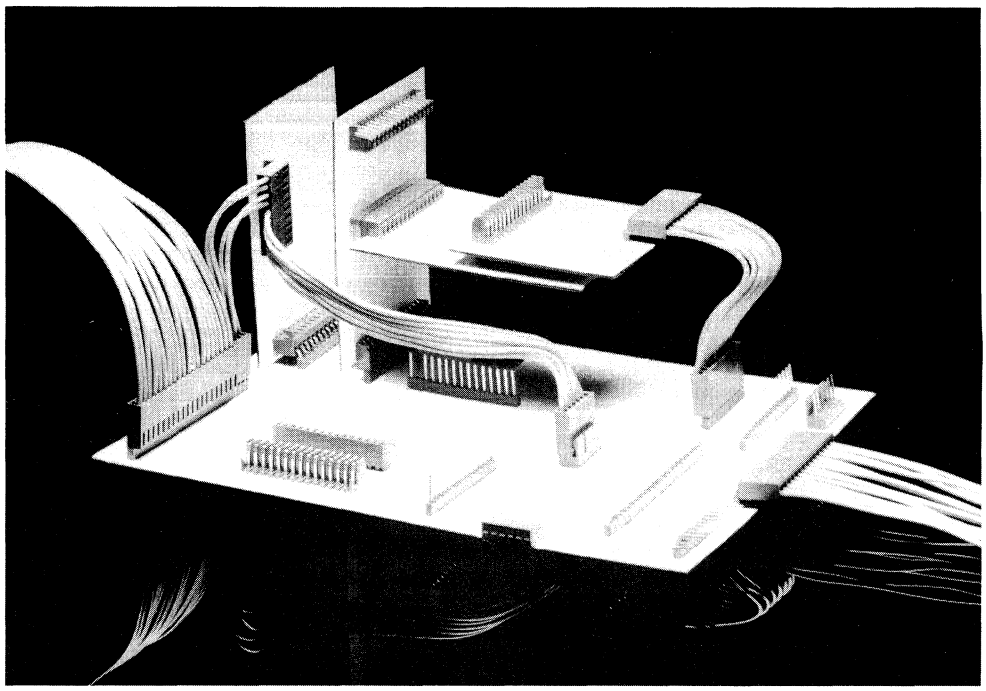
.100	24327	24	Stranded Overcoat (19 x 36)	31	113	109	8.8	13.0	1.4	2000	7D

CENTER SPACING	AWG	CONDUCTOR TYPES		
		Solid Tinned One tinned copper wire conductor.	**Stranded Tinned** Individual tinned copper wires, twisted together.	**Topcoated** Bare copper wires twisted together, then coated with pure tin.
				

All information contained herein, including illustrations, specifications and dimensions, is believed to be reliable as of the date of publication, but is subject to change without notice. Current sales drawings and specifications are available upon request. Molex makes no claims or warranties as to the application of this product or its suitability or fitness for any particular purpose. Accordingly, it is recommended that each user independently test and evaluate the product for its intended use.

P.C. Board Interconnection Systems

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KK® Modular Interconnection System

Introduction
The Molex KK® Interconnection System

The proven KK® system of "building block" connectors can be used to create thousands of different configurations, thereby allowing each user to build a system that is precisely suited to any application on .098" (2,5mm), .100" (2,54mm), .156" (3,96mm), and .200" (5,08mm) centers.

The system offers interconnection in a number of modes; cable-to-board, board-to-board, both parallel and perpendicular; and board- or cable-to-chassis. Features include a friction lock to secure connectors to wafer, polarizing wall or location pegs to assure correct assembly, and a chassis mount option for mounting to sheet metal panels. Various methods of securely holding the connectors to a P.C. board are available.

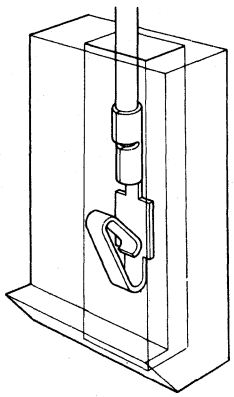
The Molex KK® interconnect system can provide all the options necessary to complement P.C. board interconnection design requirements. For this reason KK® has become known as a versatile interconnecting system developed to meet the challenge of modularization. **For specifications or design information please contact a Molex representative.**

To complement the KK® System Molex has developed a full line of application tooling. This includes both manual and semi-automatic crimp tooling, and also some of the fastest and most economical pinsetting equipment in the industry. The Molex Vibrator Multi-Pinsetter® can set 12,000 pins in three minutes. See Application Tooling section of this catalog for details.

Molex KK® Concept

The Molex KK concept utilizes a **double cantilever contact design** in mating with P.C. board pins. The proven double cantilever design provides a high uniform contact pressure for a reliable connector interface. The high pressure creates many contact points at a microscopic level, thereby providing a lower contact resistance. The wiping action of the double cantilever design tends to clean oxides and film when the connector is mated.

The Molex KK concept provides a durable connector interface at an affordable price ... a totally engineered product.



Features

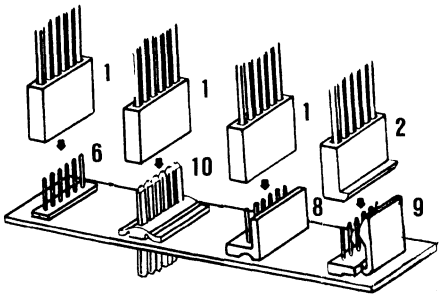
Crimp Terminal Housings
- Available on .098" (2,5mm), .100" (2,54mm), .156" (3,96mm), and .200" (5,08mm) center spacings
- Polarization via insertable keys and pegs, molded voids or pegs, polarizing ribs, or polarizing wall headers
- Locking ramp for improved mated retention with locking headers
- Many circuit sizes
- Accepts KK® gas tight crimp terminals
- Mates with headers or pins in the board
- Available with tin, gold, or select gold plating

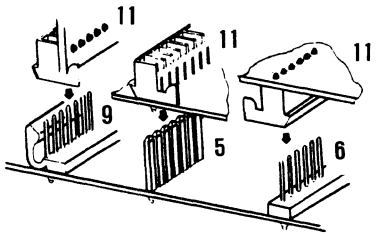
Solder Tail Connectors
- Versions to accept mating pins vertically, horizontally, or through the printed circuit board
- Available on .098" (2,5mm), .100" (2,54mm), .156" (3,96mm), and .200" (5,08mm) center spacings
- Mates with headers or pins in the board
- Strain relieving board hooks
- Polarization via insertable keys or pegs
- Locking ramps for improved retention when mated
- Stackable end-to-end
- Preassembled with KK® gas tight terminals

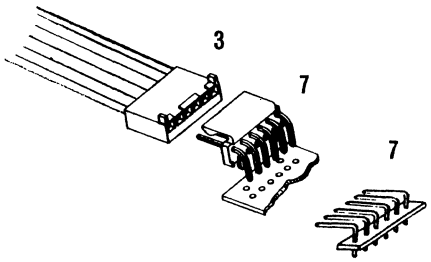
Headers
- Available on .098" (2,5mm), .100" (2,54mm), .156" (3,96mm), and .200" (5,08mm) center spacings
- Polarization via voided positions and polarizing walls, [except .098" (2,5mm)]
- Locking wall option for improved retention with mating connector
- .156" (3,96mm) chassis or board mount version for feed thru applications
- Industry compatible
- Breakaway and solid styles available

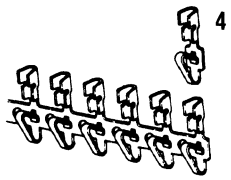
Male Pins
- .025" (0,64mm) square or .045" (1,14mm) square or round
- Press fit and solder to board
- Mates with crimp or solder connector
- Variety of standard platings and lengths
- Range of application tooling available

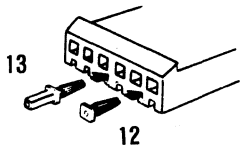
Molex KK® Modular Interconnection System











No.	Description	Center Spacing .098 (2,50)	.100 (2,54)	.156 (3,96)	.200 (5,08)
1.	Connector housing for use with crimp terminals	5051 3180	2695 6471 7880	2139 6442 41695	3001
2.	Connector housing with locking ramp	5051	2695 6471	2139 3069 41695	
3.	Connector with polarizing rib and locking ramp	3072	2695	41695	3011
4.	Terminals for use with above housings	2759 4809	2759 4809 7879	2478 2578 6838 7258	2478 2578
5.	Male pins	2766 4166	2766 4166	2173 2161	2173 2161
6.	Straight headers	3022	4030 42375	41661 41701 41741 41771 42441 42471 3192	3003
7.	Right Angle Header	3094 6494	4094 42376	41662 41672 41682 41772 41792+ 42472 42492+ 3246	2673 3061
8.	Polarizing header	3202	42225 42226	41681 41682	
9.	Locking header	5045 5046	6410 6373 7478 7395 42227 42228	41671 41672 41761+ 41791+ 41792+ 42461+ 42491+ 42492+ 4042	
10.	Chassis mount header			2220	
11.	Board-to-Board interconnect for parallel and perpendicular PC boards	7534 5124	4455	41815 2145	3002
12.	Polarizing key without peg	4161-1	4161-1	2560-1 7580-1 42324-A	2560-1
13.	Polarizing key with peg	4161-2	4161-2	2560-2 7580-2	2560-2

+Polarized when mated with 41695 Series .156" crimp housing with polarizing ribs and locking ramp.

E

KK® Technical Data Reference*
Crimp & PCB Connectors

KK® .098" (2,5 mm) and .100" (2,54 mm)

UL Recognized (File #29179)
CSA Recognized (File 19980)

Voltage Rating - 250 VAC maximum
Current Rating - Up to 2.5 amps (with 22 AWG wire) per Product Specification
Resistance - 20 milliohms maximum (after testing per MIL STD 202E)
Dielectric Withstanding Voltage - 1500 VAC for 60 seconds
Insulation Resistance - Greater than 500K megohms (75ºF and 50% R.H.)

Storage Temperature - -40ºC to 105ºC

Engagement Force - 7 oz. (199g) maximum with tin plated .025" (0,64 mm) square pin
Disengagement Force - 2 oz. (57g) minimum for first cycle with tin plated .025" (0,64mm) square pin

Terminal Retention to Housing - 8 lbs. (3,63kg) minimum
Wire Pullout Forces (Crimp) - 22 AWG - 10 lbs (4,54kg)
24 AWG - 8 lbs (3,63kg)
26 AWG - 6 lbs (2,72kg)
28 AWG - 4 lbs (1,81kg)
30 AWG - 3 lbs. (1,36kg)

***Detailed product specifications should be requested for approval testing and final specification.**

KK® .156" (3,96 mm) and .200" (5,08 mm)

UL Recognized (File #29179)
CSA Recognized (File 19980)

Voltage Rating - 250 VAC maximum
Current Rating - Up to 7 amps for phosphor bronze terminals (with 18 AWG wire) per Product Specification
Resistance - 20 milliohms maximum (after testing per MIL STD 202E)
Dielectric Withstanding Voltage - 1500 VAC for 60 seconds
Insulation Resistance - Greater than 500K megohms (75°F and 50% R.H.)

Storage Temperature - -40°C to 105°C

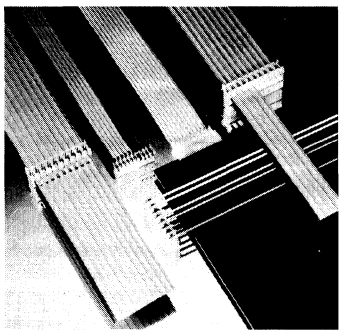
Engagement Force - 24 oz. (680g) maximum with tin plated .045" (1,14 mm) square pin or round pin;
27 oz. for Trifurcon® terminal
Disengagement Force - 4 oz. (113g) minimum with .045" (1,14mm) square or round pin.
Model 2145-B is 2 oz. (57g) minimum

Terminal Retention to Housing - 8 lbs. (3,63kg) minimum
Wire Pullout Forces (Crimp) - 18 AWG - 20 lbs (9,07kg)
20 AWG - 15 lbs (6,81kg)
22 AWG - 12 lbs (5,45kg)
24 AWG - 8 lbs (3,63kg)
26 AWG - 5 lbs (2,27kg)

*** Detailed product specifications should be requested for approval testing and final specification.**

Insulation Displacement Technology

Introduction



Molex offers you a complete line of insulation displacement systems for discrete wire and flat cable applications.

Our insulation displacement technology (IDT™) connectors offer you a dramatic applied cost savings over equivalent crimp connectors. The reason: With IDT™ all contacts are terminated in a single step, the insulation being displaced from the conductor as the wire is pushed into the connector body. The labor intensive steps of wire stripping and terminal crimping are eliminated from the process. And, when our IDT™ connectors are terminated in mass, your cost savings multiply by the number of circuits used.

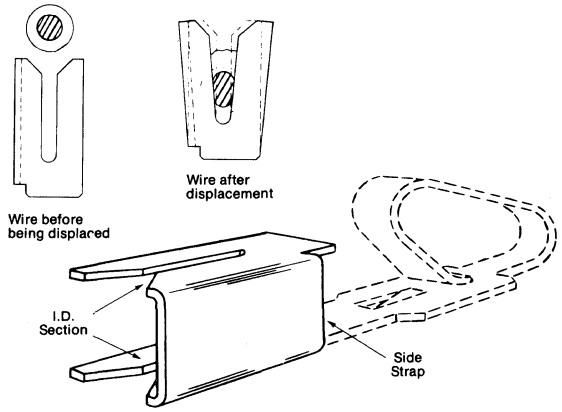
Our broad range of available connector styles and center spacings means that Molex IDT™ products can be used as drop-in replacements for other less cost effective systems. Locking ramps, polarizing voids and dust covers are available for almost all of our connectors.

To terminate our IDT™ products Molex offers a full line of application tooling from hand tools to completely automated harness assembly machines. Refer to the Application Tooling section of this catalog for details.

IDT Concept

The Molex design features two parallel plates with chamfered lead-in slots. These slots displace wire insulation and reshape the conductors by pressure. The result: 4 high pressure points of contact.

To provide a wide conductor path and both horizontal and lateral strength, the insulation displacement section is connected by a large side strap which runs almost the entire length of the plate.

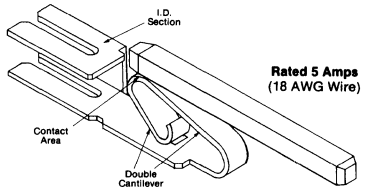


Terminal Designs

KK® Double Cantilever Contact

.156" (3,96 mm) and .200" (5,08 mm) Center Connectors

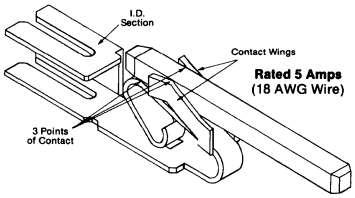
The double cantilever contact provides a high pressure contact area with a square or round post. The two cantilevers act in unison to provide a linear force increase as the pin is pushed in the housing.



Trifurcon Contact Design

.156" (3,96 mm) and .200" (5,08 mm) Center Connectors

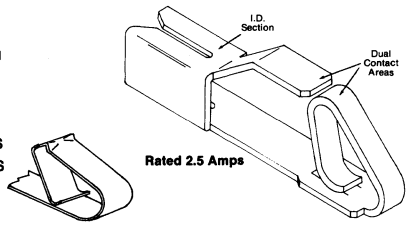
An ideal choice for situations where flux contamination, shock, or vibration exists, this terminal incorporates the double cantilever design with contact wings in the vertical plane. Contact is achieved at three points on the mating pin. While insertion force of this combination is slightly increased, the extraction force is greatly increased and maintained through disconnect cycling.



Dual Contact / with Cat Ears Option

.098" (2,5 mm) and .100" (2,54 mm) Center Connectors

The dual contact utilizes the double cantilever approach and expands upon the design by extending a beam off the insulation displacing sections. The second stationary contact results in two independent points of contact on the mating pin.



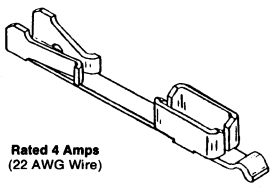
Molex "Cat Ears" Concept

High Pressure

In-Line Contact (Euro 250 Series)

.098" (2,5 mm), Center Connectors

This contact is ideal for in-line wire feed applications, as the dual cantilever and formed slot design provide both a low profile and a reliable interconnection.



E

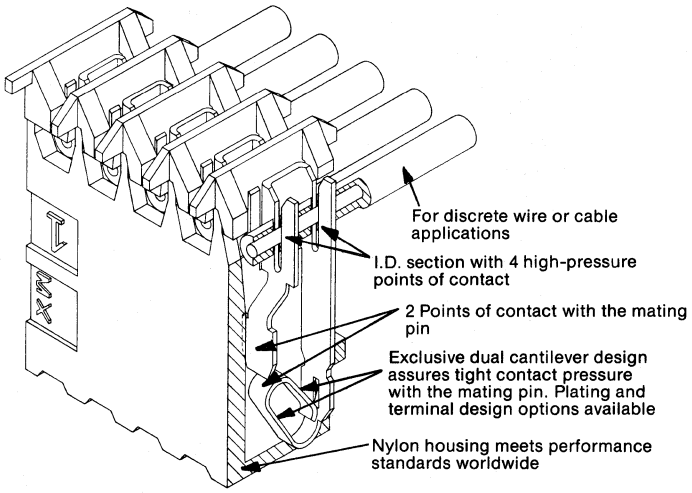
Insulation Displacement Connectors

Standard I.D.T.™ Connectors
on .098" (2,5mm) and .100" (2,54mm) Centers

Designed for use with discrete wire or round conductor flat cable, the Molex standard connectors lend themselves to a variety of applications.

- Single-ended discrete wire harnesses
- Double-ended discrete wire harnesses
- Round conductor flat cable daisy chains
- Termination of both flat cable and discrete wires in a single housing

E

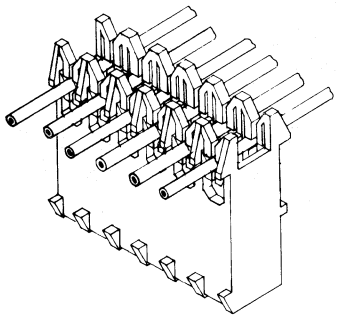


Harness Board Connectors

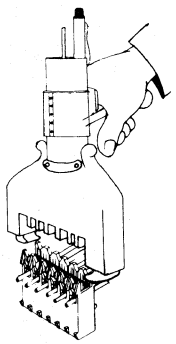
This series of connectors has an added row of molded-in wire retainers. It is designed for use with discrete wire where multiple connector breakouts or daisy chain configurations are required.

The connectors are placed into fixtures which are mounted on the harness board. These fixtures are located in the final harness configuration and positively align the connector to the termination tool.

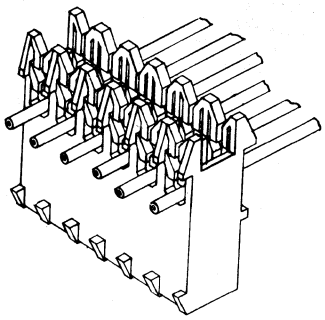
Discrete wires are then routed over the molded-in wire retainers on the connectors and snapped into position. The retainers positively position the wire over the proper insulation displacement terminal.



Wire held in place by wire retainers



Termination with hand held air tool



Wires seated, insulation displaced and held by strain relief

Upon completion of the harness wiring operation the wires are terminated with a hand-held pneumatic tool.

The result is a completed harness assembly fitted exactly to the dimensions of your particular application.

For more information on our harness board gun and fixtures see the Application Tooling section of this catalog.

Insulation Displacement Connectors Technical Data Reference*

Standard Single Row IDT .100" (2,54mm) Center Connector Specifications for Eng. Series 7720, 7690

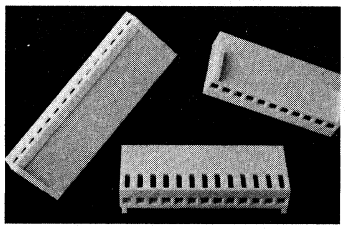
UL Recognized (File #29179) CSA Recognized (File #19980)			
Minimum Pin Insertion — .240" (6,10mm)			
Recommended Mating Life — 25 cycles			
Voltage Rating — 250 VAC maximum *Current Rating* — 3.5 amps maximum (with #24 AWG wire). See Product Specifications *Resistance* — 20 milliohms maximum (after Mil Std 202E test) *Dielectric Withstanding* — 1500 VAC for 60 seconds *Insulation Resistance* — Greater than 500K megohms (75°F and 50% R.H.)			
UL Material Rating — 94V-2 Nylon *Operating Range* — -40°C to 105°C			
Engagement Force — 9 oz. (255 g) maximum (tin-plated .025"/0,64mm square pin) *Disengagement Force* — 3 oz. (85 g) minimum first cycle (tin-plated .025"/0,64mm square pin) *Terminal Retention to Housing* — 8 lbs. (3,63 kg) minimum			
		Vertical	**Horizontal**
Average Wire Pullout Forces (without cap) —	24 AWG Stranded –	6.9 lbs.(3,13 kg)	10.7 lbs.(4,85 kg)
	26 AWG Stranded –	2.8 lbs.(1,27 kg)	7.0 lbs.(3,17 kg)
	28 AWG Stranded –	1.3 lbs.(0,59 kg)	4.7 lbs.(2,13 kg)
* Request current product specifications for approval testing and inspection. Product is durameter sensitive.			

Standard Single Row IDT .156" (3,96mm) Center Connector Specifications for Eng. Series 7675, 7674, 7660, 7664

UL Recognized (File #29179) CSA Recognized (File #19980)			
Minimum Pin Insertion — .450" (11,43mm)			
Recommended Mating Life — 25 cycles			
Voltage Rating — 250 VAC maximum *Current Rating* — 5 amps maximum (with #22 AWG wire). See Product Specifications *Resistance* — 20 milliohms maximum (after Mil Std 202E test) *Dielectric Withstanding* — 2000 VAC for 60 seconds *Insulation Resistance* — Greater than 500K megohms (75°F and 50% R.H.)			
UL Material Rating — 94V-2 Nylon *Operating Range* — -40°C to 105°C			
Engagement Force — 2.0 lbs. (0,91 kg) maximum (tin-plated .045"/1,14mm square pin) *Disengagement Force* — .5 lbs. (0,23 kg) minimum first cycle (tin-plated .045"/1,14mm square pin) *Terminal Retention to Housing* — 8 lbs. (3,63 kg) minimum			
		Vertical	**Horizontal**
Average Wire Pullout Forces (without cap) —	18 AWG Stranded –	11.9 lbs (5,39 kg)	25.5 lbs. (11,56 kg)
	20 AWG Stranded –	12.7 lbs. (5,76 kg)	22.2 lbs. (10,07 kg)
	22 AWG Stranded –	8.5 lbs. (3,86 kg)	17.4 lbs. (7,89 kg)
	24 AWG Stranded –	8.1 lbs. (3,67 kg)	13.2 lbs. (5,99 kg)
	26 AWG Stranded –	2.4 lbs. (1,09 kg)	6.9 lbs. (3,13 kg)
*Request current product specifications for approval testing and inspection. Product is durameter sensitive.			

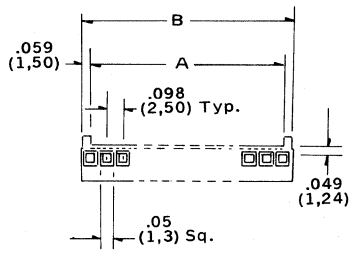
.098" (2,5 mm) Center Crimp Terminal Housings

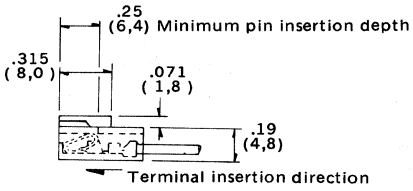
5051 Series
Polarizing Housings



- Accepts Molex double cantilever crimp terminals, 4809C and 40445.
- 94V-0 White nylon
- Molded friction lock
- 3-15 Circuits available
- Optional polarization or locking ramp version
- Mates with Molex KK .098" (2,5mm) center headers or .025" (0,64mm) staked pins
- Stackable end-to-end

E







Dimensions 5051

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
3	.197 ± .004 5,00 ± 0,10	.315 ± .008 8,00 ± 0,20	8	.689 ± .005 17,5 ± 0,13	.807 ± .009 30,5 ± 0,23	12	1.083 ± .007 27,50 ± 0,18	1.201 ± .011 30,50 ± 0,28
4	.295 ± .004 7,50 ± 0,10	.413 ± .008 10,5 ± 0,20	9	.787 ± .005 20,0 ± 0,13	.906 ± .009 23,0 ± 0,23	13	1.181 ± .007 30,00 ± 0,18	1.299 ± .011 33,00 ± 0,28
5	.394 ± .004 10,0 ± 0,10	.512 ± .008 13,0 ± 0,20	10	.886 ± .006 22,5 ± 0,15	1.004 ± .010 25,50 ± 0,25	14	1.280 ± .007 32,50 ± 0,18	1.398 ± .011 35,50 ± 0,28
6	.492 ± .004 12,5 ± 0,10	.611 ± .009 15,5 ± 0,23	11	.984 ± .006 25,0 ± 0,25	1.102 ± .010 28,00 ± 0,25	15	1.378 ± .008 35,00 ± 0,20	1.496 ± .012 38,00 ± 0,30
7	.591 ± .005 15,0 ± 0,13	.709 ± .009 18,0 ± 0,23						

Ordering Information 5051

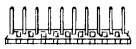
Order No. 22-01-1**XX**3
Replace **XX** with number of circuits, 03 to 15

.098" (2,5 mm) Center Standard Insulation Displacement Connector

molex®

7795S Series
Higher Pressure "Cat Ear" Contact System

- Two points of contact
- 2-17 Circuits
- Standard with locking ramp
- Polarizing key option
- Molded in strain reliefs
- Accepts wire O.D. from .030" (0,76mm) to .060" (1,52mm) max.
- Accepts solid and stranded and fused wire
- Mates with standard .098" (2,50mm) headers, see list below
- UL recognition applied for
- 5 Microns min. tin (preplate) on terminals



Headers

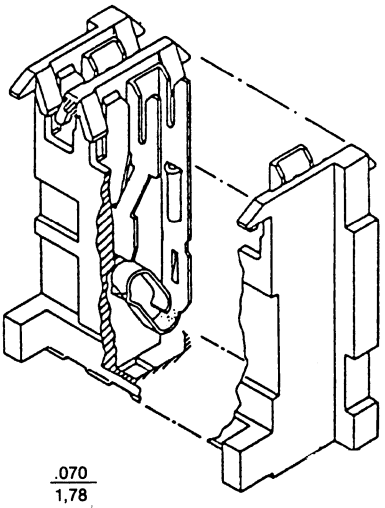
3022	5046
3094	6494
3202	5045
90298	90293

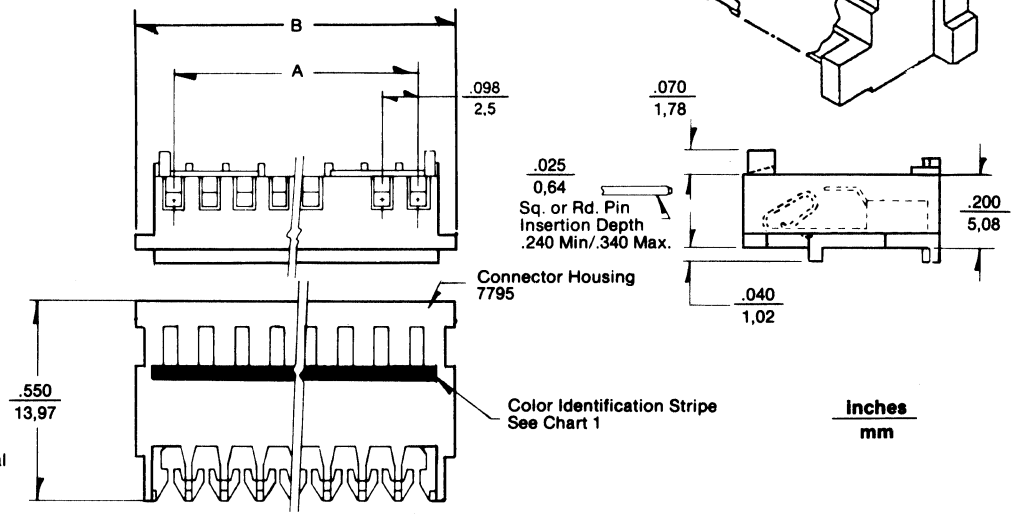
Covers



7841 Series
Feed-Thru
Feed-To

MATERIAL:
Housing: Nylon 94V-2, Color: Natural
Terminal: Brass, Tin-Plated





E

Dimensions 7795S (Preferred version in Europe and the Far East)

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.098 2,50	.290 7,36	6	.492 12,50	.683 17,36	10	.886 22,50	1.077 27,36	14	1.280 32,50	1.471 37,36
3	.197 5,00	.388 9,86	7	.591 15,00	.782 19,86	11	.984 25,00	1.176 29,86	15	1.378 35,00	1.568 39,86
4	.295 7,50	.487 12,36	8	.689 17,50	.880 22,36	12	1.083 27,50	1.274 32,36	16	1.476 37,50	1.668 42,36
5	.394 10,00	.585 14,86	9	.787 20,00	.979 24,86	13	1.181 30,00	1.372 34,86	17	1.575 40,00	1.766 44,86

Ordering Information

CHART 1 (Color Identification Stripe)			
I.D. Slot Version	Order Nos.	Color	Type of Wire Terminated [All wires have a Max. Insulation Diameter of .060" (1,5mm)]
H	38-00-3282 thru -3297	Yellow	#24 AWG Stranded, #26 Solid and #28 Fused
J	38-00-3102 thru -3117	Red	#26 and 28 AWG Stranded and #28 Solid

Circuits	Version H	Circuits	Version H	Circuits	Version H	Circuits	Version H	Circuits	Version H	Circuits	Version H
2	38-00-3282	5	38-00-3285	8	38-00-3288	11	38-00-3291	14	38-00-3294	16	38-00-3296
3	38-00-3283	6	38-00-3286	9	38-00-3289	12	38-00-3292	15	38-00-3295	17	38-00-3297
4	38-00-3284	7	38-00-3287	10	38-00-3290	13	38-00-3293				

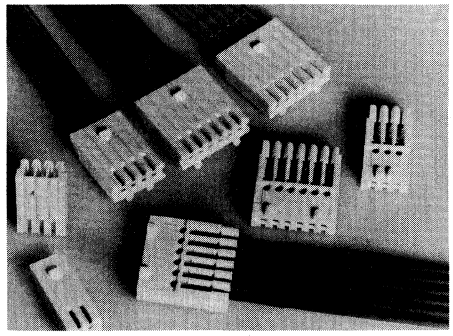
Circuits	Version J	Circuits	Version J	Circuits	Version J	Circuits	Version J	Circuits	Version J	Circuits	Version J
2	38-00-3102	5	38-00-3105	8	38-00-3108	11	38-00-3111	14	38-00-3114	16	38-00-3116
3	38-00-3103	6	38-00-3106	9	38-00-3109	12	38-00-3112	15	38-00-3115	17	38-00-3117
4	38-00-3104	7	38-00-3107	10	38-00-3110	13	38-00-3113				

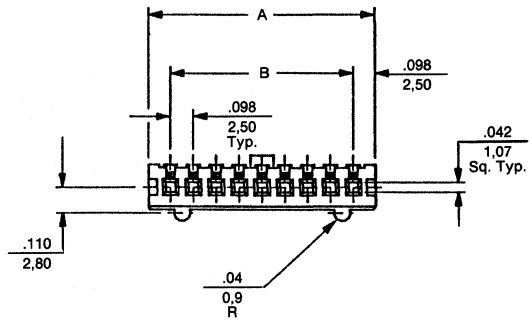
Recommended Molex ribbon cable for use with this connector:
Eng. Nos. 7234, 7307, 24241, 24226, 7767, 8996.
> 10 circuits wide, contact factory.

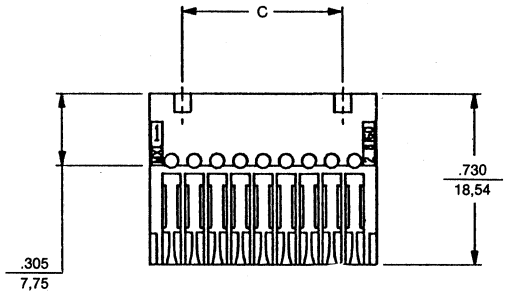
.098" (2,5 mm) Center Insulation Displacement Connector

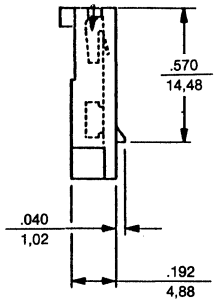
8160-NG Series
Euro 250 Series
In-Line Wire Exit

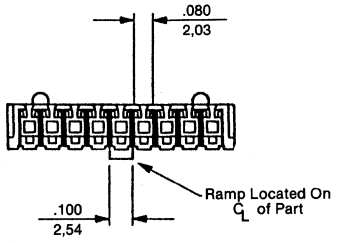
- 4 point IDT contact
- 2 Point interface pin contact
- 4 Amp (Subject to application variables)
- 2-20 Circuits
- 24 AWG solid discrete wire and cable
- Housings for O.D. insulation .053" (1,35mm) to .060" (1,52mm) max.
- 94V-0 Polyester
- Mates with 93610, 3094, and 3022 headers
- Terminal: phosphor bronze
- Plating: tin over copper
- Crimp terminal 8177 available











Dimensions

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
2	.295 ± .003 7,50 ± 0,08	.098 ± .004 2,50 ± 0,10	—	9	.984 ± .006 25,00 ± 0,15	.787 ± .007 20,00 ± 0,18	.689 ± .007 17,50 ± 0,18	15	1.575 ± .008 40,00 ± 0,20	1.378 ± .009 35,00 ± 0,23	1.280 ± .009 32,50 ± 0,23
3	.394 ± .003 10,00 ± 0,08	.197 ± .005 5,00 ± 0,13	.098 ± .004 2,50 ± 0,10	10	1.083 ± .006 27,50 ± 0,15	.886 ± .008 22,50 ± 0,20	.787 ± .007 20,00 ± 0,18	16	1.673 ± .009 42,50 ± 0,23	1.476 ± .010 37,50 ± 0,25	1.378 ± .009 35,00 ± 0,23
4	.492 ± .003 12,50 ± 0,08	.295 ± .005 7,50 ± 0,13	.197 ± .005 5,00 ± 0,13	11	1.181 ± .007 30,00 ± 0,18	.984 ± .008 25,00 ± 0,20	.886 ± .008 22,50 ± 0,20	17	1.772 ± .010 45,00 ± 0,25	1.575 ± .011 40,00 ± 0,28	1.476 ± .010 37,50 ± 0,25
5	.591 ± .004 15,00 ± 0,10	.394 ± .006 10,00 ± 0,15	.295 ± .005 7,50 ± 0,13	12	1.280 ± .007 32,50 ± 0,18	1.083 ± .008 27,50 ± 0,20	.984 ± .008 25,00 ± 0,20	18	1.870 ± .011 47,50 ± 0,28	1.673 ± .011 42,50 ± 0,28	1.575 ± .011 40,00 ± 0,28
6	.689 ± .004 17,50 ± 0,10	.492 ± .006 12,50 ± 0,15	.394 ± .006 10,00 ± 0,15	13	1.378 ± .008 35,00 ± 0,20	1.181 ± .008 30,00 ± 0,20	1.083 ± .008 27,50 ± 0,20	19	1.969 ± .011 50,00 ± 0,28	1.772 ± .011 45,00 ± 0,28	1.673 ± .011 42,50 ± 0,28
7	.787 ± .005 20,00 ± 0,13	.591 ± .007 15,00 ± 0,18	.492 ± .006 12,50 ± 0,15	14	1.476 ± .008 37,50 ± 0,20	1.280 ± .009 32,50 ± 0,23	1.181 ± .008 30,00 ± 0,20	20	2.067 ± .012 52,50 ± 0,30	1.870 ± .011 47,50 ± 0,28	1.772 ± .011 45,00 ± 0,28
8	.886 ± .005 22,50 ± 0,13	.689 ± .007 17,50 ± 0,18	.591 ± .007 15,00 ± 0,18								

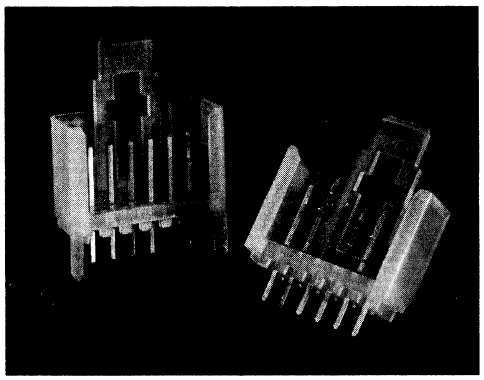
Ordering Information

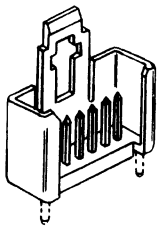
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	38-00-6132	7	38-00-6137	12	38-00-6142	17	38-00-6147
3	38-00-6133	8	38-00-6138	13	38-00-6143	18	38-00-6148
4	38-00-6134	9	38-00-6139	14	38-00-6144	19	38-00-6149
5	38-00-6135	10	38-00-6140	15	38-00-6145	20	38-00-6150
6	38-00-6136	11	38-00-6141	16	38-00-6146		

.098" (2,5 mm) Center Shrouded Header

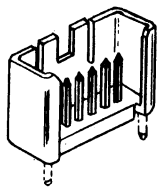
93610 Series
Header Assembly Staggered Tail and Straight Tail

- 2-10 Circuits
- With "Multi-Lock" (or without lock - optional)
- Straight pin version available non-polarized (or with left polarizing peg only, right peg only, or with both pegs - optional)
- Staggered pin version available non-polarized (or with right polarizing peg only - optional)
- Colors: Natural or black
- UL 94V-0 polyester material
- .025" (0,64mm) square pins, electro tin plated
- Mates with 8160

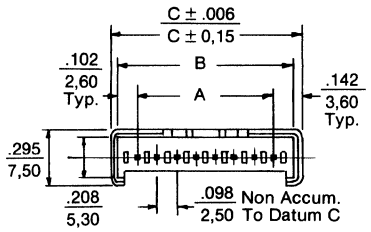


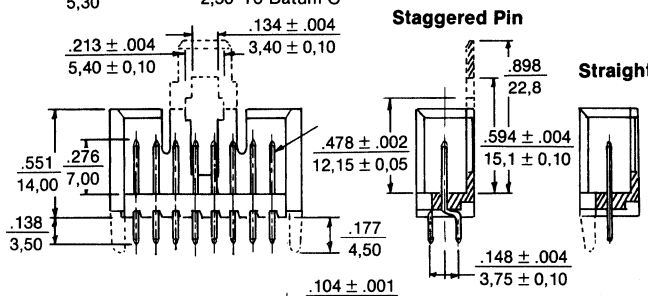


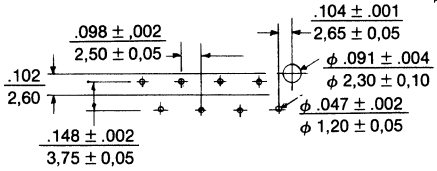
Multi-Lock



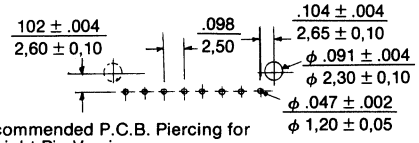
Without-Lock







Recommended P.C.B Piercing for Staggered Pin Version. Viewed from Copper Side.



Recommended P.C.B. Piercing for Straight Pin Version.

Dimensions

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
2	.098 2,50	.303 7,70	.382 9,70	5	.394 10,00	.589 15,20	.677 17,20	8	.689 17,50	.884 22,70	.972 24,70
3	.197 5,00	.402 10,20	.480 12,20	6	.497 12,50	.687 17,70	.776 19,70	9	.782 20,00	.992 25,20 AV	1.071 27,20
4	.295 7,50	.500 12,70	.579 14,70	7	.590 15,00	.795 20,00	.874 22,70	10	.886 22,50	1.091 27,70	1.169 29,70

Ordering Information 93610 (For standard 94V-0 nylon, multi-lock, no polarizing pegs, natural color*)

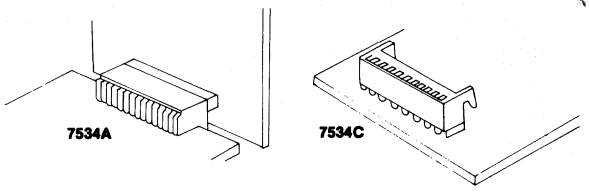
Circuits	Straight Tail	Staggered Tail	Circuits	Straight Tail	Staggered Tail	Circuits	Straight Tail	Staggered Tail
2	93610-0020	—	5	93610-0032	93610-0062	8	93610-0044	93610-0068
3	93610-0024	—	6	93610-0036	93610-0064	9	93610-0048	93610-0070
4	93610-0028	93610-0060	7	93610-0040	93610-0066	10	93610-0052	93610-0072

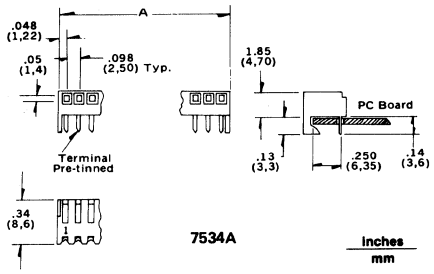
*Also available in 94V-2 material. To order, replace 93610-XXXX with 90087-XXXX. Contact factory to order optional versions and for circuit sizes 11 through 20.

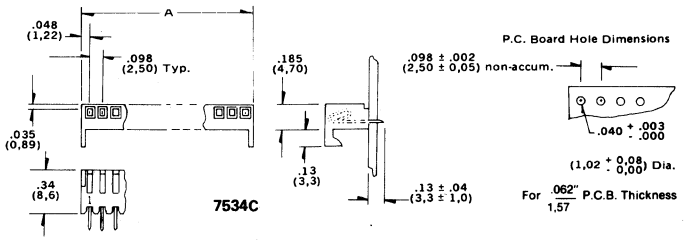
.098" (2,5mm) Center P.C. Board Connectors

7534A Series
Right Angle P.C. Board Connector
7534C Series
Top Entry P.C. Board Connector

- Mates with Molex 3022, 3202, 3094, 6494 headers or .025" (0,64mm) pins
- 94V-0 White nylon
- 2-20 Circuits available
- P.C. board locking hooks and standoffs
- Terminal platings: .000040 (1,0 microns) tin-lead/.000080 (2,0 microns) copper min. or .000020 (0,5 microns) gold/ .000030 (0,75 microns) nickel min.







Dimensions 7534A, 7534C

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
3	.293 ± .008 7,44 ± 0,20	7	.687 ± .009 17,44 ± 0,23	10	.982 ± .010 24,94 ± 0,25	13	1.278 ± .011 32,44 ± 0,28
4	.392 ± .008 9,94 ± 0,20	8	.785 ± .009 19,94 ± 0,23	11	1.081 ± .010 27,44 ± 0,25	14	1.376 ± .011 34,94 ± 0,28
5	.490 ± .008 12,44 ± 0,20	9	.884 ± .009 22,44 ± 0,23	12	1.179 ± .011 29,94 ± 0,28	15	1.475 ± .012 37,44 ± 0,30

Ordering Information 7534A

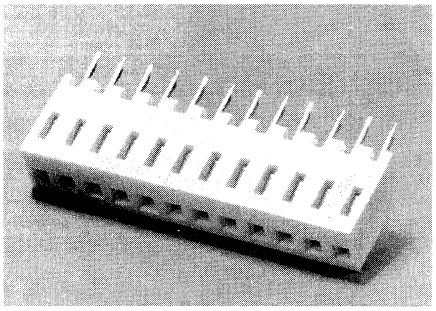
Tin Order No. 22-02-1**XX**4
Gold Order No. 22-16-1**XX**3
Replace **XX** with number of circuits, 02 to 20

Ordering Information 7534C

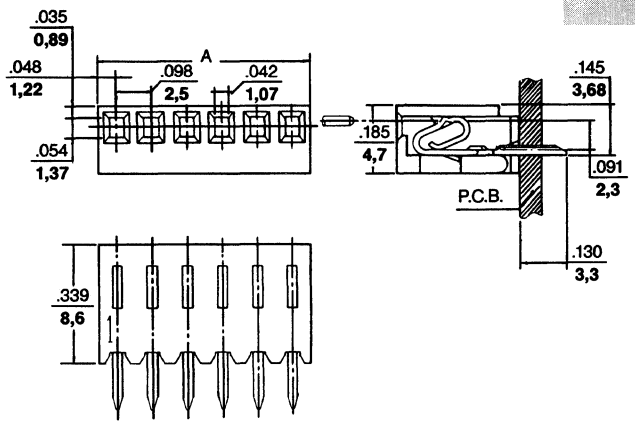
Tin Order No. 22-02-1**XX**5
Replace **XX** with number of circuits, 02 to 20

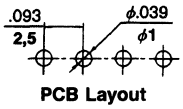
.098" (2,5 mm) Single Row Board-to-Board System

5224-NCHPB
Single Row Receptacle



- Nylon 6/6, UL 94 V-0
- Tin plated phos-bronze terminals
- 2-15 circuits
- 250V, 3 Amps, max.
- Mates with: 3022-NA
- Mated height .469" (11,9 mm); Mated width .185" (4,7 mm)



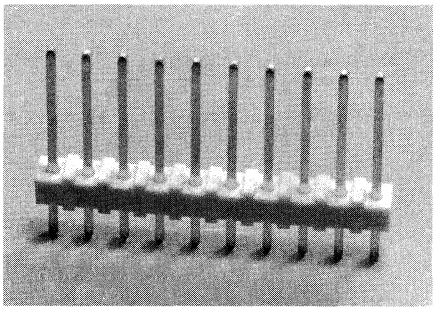


PCB Layout

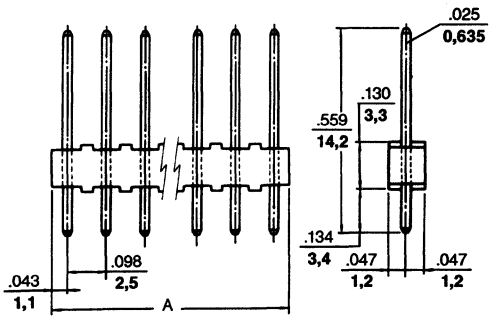
Ordering Information and Dimensions

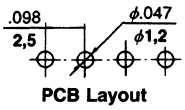
Circuits	Order No.	Dim. A	Circuits	Order No.	Dim. A
2	22-02-3024	.194 **4,94**	9	22-02-3094	.883 **22,44**
3	22-02-3034	.293 **7,44**	10	22-02-3104	.982 **24,94**
4	22-02-3044	.391 **9,94**	11	22-02-3114	1.080 **27,44**
5	22-02-3054	.490 **12,44**	12	22-02-3124	1.179 **29,94**
6	22-02-3064	.588 **14,94**	13	22-02-3134	1.277 **32,44**
7	22-02-3074	.687 **17,44**	14	22-02-3144	1.376 **34,94**
8	22-02-3084	.785 **19,94**	15	22-02-3154	1.474 **37,44**

3022-NA
Single Row Header



- Nylon 6/6, UL 94 V-0
- Tin plated brass pins
- 2-15 circuits
- Mates with: 3024-NAHPB 5224-NCHPB





PCB Layout

Ordering Information and Dimensions

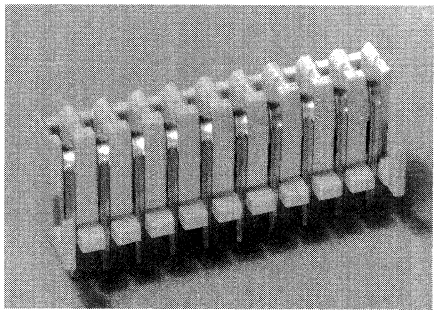
Circuits	Order No.	Dim. A	Circuits	Order No.	Dim. A
2	22-03-1021	.193 **4,9**	9	22-03-1091	.874 **22,2**
3	22-03-1031	.283 **7,2**	10	22-03-1101	.972 **24,7**
4	22-03-1041	.382 **9,7**	11	22-03-1111	1.071 **27,2**
5	22-03-1051	.480 **12,2**	12	22-03-1121	1.169 **29,7**
6	22-03-1061	.579 **14,7**	13	22-03-1131	1.268 **32,2**
7	22-03-1071	.677 **17,2**	14	22-03-1141	1.366 **34,7**
8	22-03-1081	.776 **19,7**	15	22-03-1151	1.465 **37,2**

.098" (2,5 mm) Board-to-Board Bottom Entry System

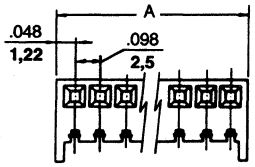
E

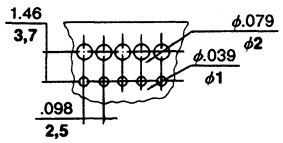
5124-NBHPB

Bottom Entry Connector, Single Row

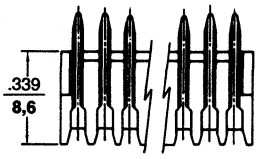


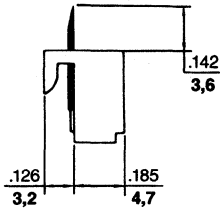
- Nylon 6/6, UL 94 V-0
- Tin plated phos-bronze terminals
- 2-20 circuits
- 250V, 3 Amps, max.
- Mates with: 3022-NB
- Mated height .567 (14,4 mm); Mated width .311 (7,9 mm)





PCB Layout



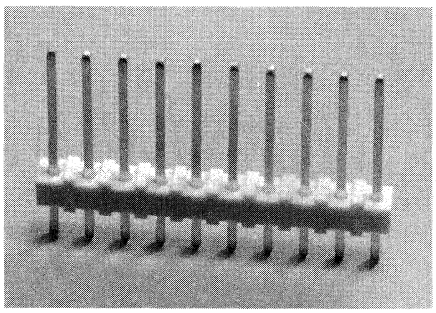


Ordering Information and Dimensions

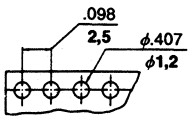
Circuits	Order No.	Dim. A	Circuits	Order No.	Dim. A
2	10-07-2025	.194 **4,94**	12	10-07-2125	1.179 **29,94**
3	10-07-2035	.293 **7,44**	13	10-07-2135	1.277 **32,44**
4	10-07-2045	.391 **9,94**	14	10-07-2145	1.376 **34,94**
5	10-07-2055	.490 **12,44**	15	10-07-2155	1.474 **37,44**
6	10-07-2065	.588 **14,94**	16	10-07-2165	1.572 **39,94**
7	10-07-2075	.687 **17,44**	17	10-07-2175	1.671 **42,44**
8	10-07-2085	.785 **19,44**	18	10-07-2185	1.769 **44,94**
9	10-07-2095	.883 **22,44**	19	10-07-2195	1.868 **47,44**
10	10-07-2105	.982 **24,94**	20	10-07-2205	1.966 **49,94**
11	10-07-2115	1.080 **27,44**			

3022-NB

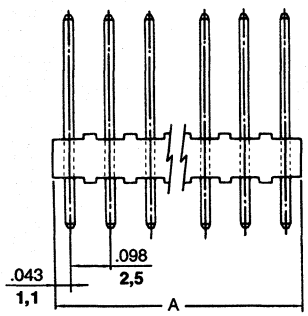
Single Row Header

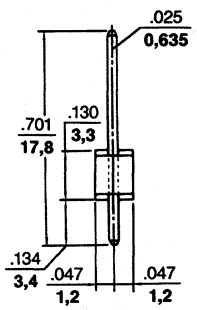


- Nylon 6/6, UL 94 V-0
- Tin plated phos-bronze terminals
- 2-15 circuits
- Mates with: 5124-NBHPB



PCB Layout



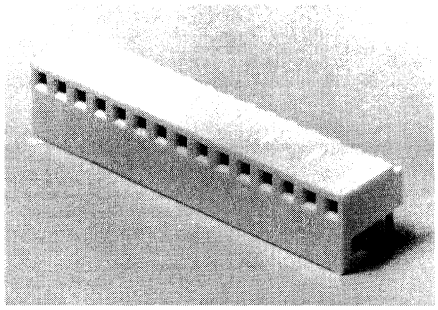


Ordering Information and Dimensions

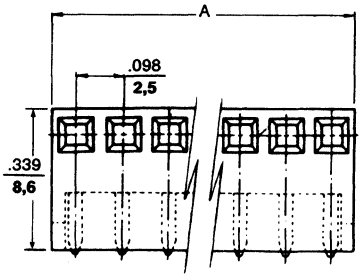
Circuits	Order No.	Dim. A	Circuits	Order No.	Dim. A
2	22-03-1022	.185 **4,7**	12	22-03-1122	1.169 **29,7**
3	22-03-1032	.283 **7,2**	13	22-03-1132	1.268 **32,2**
4	22-03-1042	.382 **9,7**	14	22-03-1142	1.366 **34,7**
5	22-03-1052	.480 **12,2**	15	22-03-1152	1.465 **37,2**
6	22-03-1062	.579 **14,7**	16	22-03-1162	1.563 **39,7**
7	22-03-1072	.677 **17,2**	17	22-03-1172	1.661 **42,2**
8	22-03-1082	.776 **19,7**	18	22-03-1182	1.760 **44,7**
9	22-03-1092	.874 **22,2**	19	22-03-1192	1.858 **47,2**
10	22-03-1102	.972 **24,7**	20	22-03-1202	1.957 **49,7**
11	22-03-1112	1.071 **27,2**			

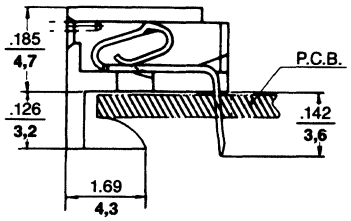
.098" (2,5 mm) Single Row Board-to-Board Connector

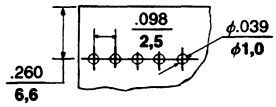
5244-NAHPB
Single Row Receptacle



- Nylon 6/6, UL 94 V-0
- Tin plated phos-bronze terminals
- 2-15 circuits
- 250V, 3 Amps, max.
- Mates with: 5245-NA
- Mated height .472" (12 mm); Mated width .358" (9,1 mm)





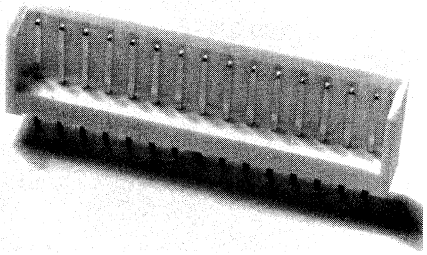


PCB Layout

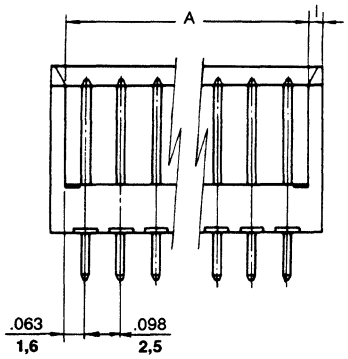
Ordering Information and Dimensions

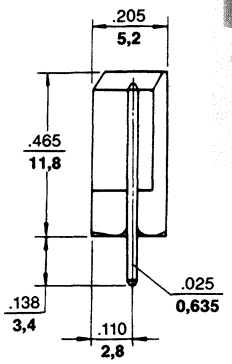
Circuits	Order No.	Dim. A	Circuits	Order No.	Dim. A
2	22-15-3022	.194 **4,94**	9	22-15-3092	.883 **22,44**
3	22-15-3032	.293 **7,44**	10	22-15-3102	.982 **24,94**
4	22-15-3042	.391 **9,94**	11	22-15-3112	1.080 **27,44**
5	22-15-3052	.490 **12,44**	12	22-15-3122	1.179 **29,94**
6	22-15-3062	.588 **14,94**	13	22-15-3132	1.277 **32,44**
7	22-15-3072	.687 **17,44**	14	22-15-3142	1.376 **34,94**
8	22-15-3082	.785 **19,94**	15	22-15-3152	1.474 **37,44**

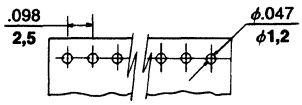
5245-NA
Single Row Backwall Header



- Nylon 6/6, UL 94 V-0
- Tin plated brass pins
- 2-15 circuits
- Mates with: 5244-NAHPB







PCB Layout

Ordering Information and Dimensions

Circuits	Order No.	Dim. A	Circuits	Order No.	Dim. A
2	22-03-5024	.224 **5,7**	9	22-03-5094	.913 **23,2**
3	22-03-5034	.323 **8,2**	10	22-03-5104	1.012 **25,7**
4	22-03-5044	.421 **10,7**	11	22-03-5114	1.110 **28,2**
5	22-03-5054	.520 **13,2**	12	22-03-5124	1.209 **30,7**
6	22-03-5064	.618 **15,7**	13	22-03-5134	1.307 **33,2**
7	22-03-5074	.717 **18,2**	14	22-03-5144	1.406 **35,7**
8	22-03-5084	.815 **20,7**	15	22-03-5154	1.504 **38,2**

E

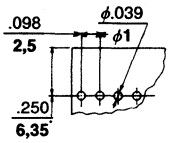
.098" (2,5 mm) Board-to-Board Connector

3024-NAHPB

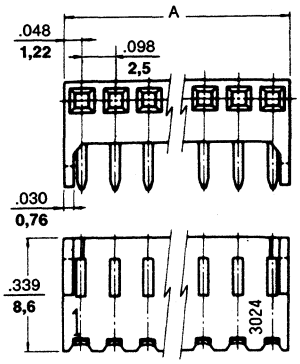
Single Row Right Angle Receptacle

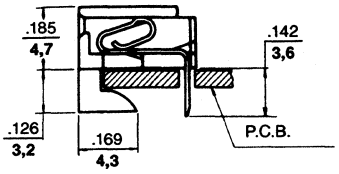
- Nylon 6/6, UL 94 V-0
- Tin plated phosphor-bronze terminals
- 2-15 circuits
- 250V, 3 Amps, max.
- Mates with: 3022-NA

E



PCB Layout





Ordering Information and Dimensions

Circuits	Order No.	Dim. A	Circuits	Order No.	Dim. A
2	22-15-1022	.194 **4,94**	9	22-15-1092	.883 **22,44**
3	22-15-1032	.293 **7,44**	10	22-15-1102	.982 **24,94**
4	22-15-1042	.391 **9,94**	11	22-15-1112	1.080 **27,44**
5	22-15-1052	.490 **12,44**	12	22-15-1122	1.179 **29,94**
6	22-15-1062	.588 **14,94**	13	22-15-1132	1.277 **32,44**
7	22-15-1072	.687 **17,44**	14	22-15-1142	1.376 **34,94**
8	22-15-1082	.785 **19,94**	15	22-15-1152	1.474 **37,44**

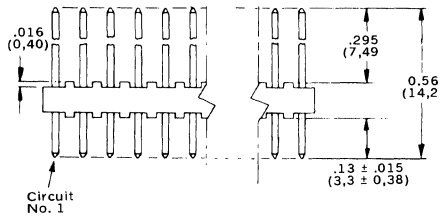
.098" (2,5 mm) Center Headers

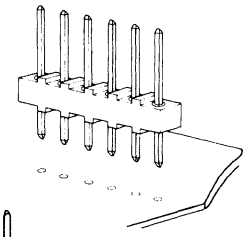
3202 Series
Square Pin Straight Header

- 3202 available 2-20 circuits
- .025" (0,64mm) square wire pins
- 94V-0 Nylon
- Stackable side-to-side and end-to-end

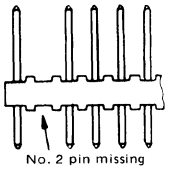
Mating connectors for **3202:**

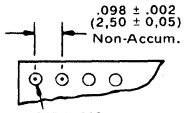
3071	7534C
3180	5124BHPB
7534A	





3202





Recommended P.C. Board Hole Dimensions

Ordering Information 3202

Order No: 22-03-1**XX**5
Replace **XX** with number of circuits, 02-20

3094/6494
Square Pin Right Angle Header

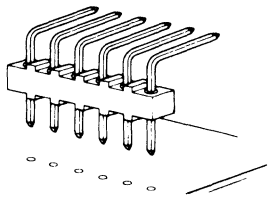
- 2-20 Circuits
- .025" (0,64mm) right angle square wire pins
- 94V-0 Nylon
- Stackable end-to-end

Mating connectors for **3094**:

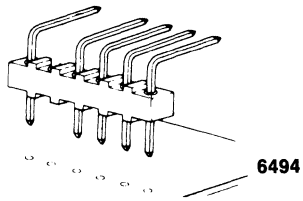
3071	7534A
5051	7534C

Mating connectors for **6494:**

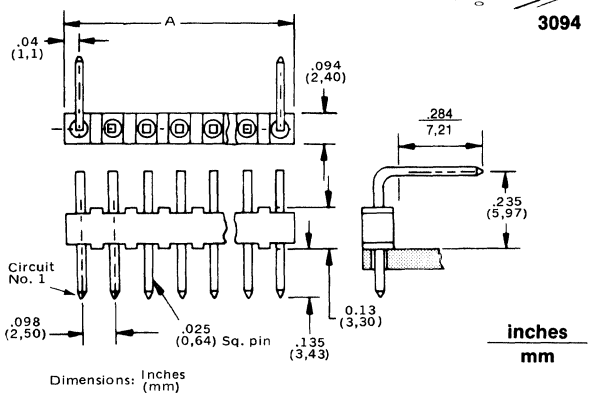
3071	7534A
3180	7534C
5051	



3094



6494



Ordering Information 3094

Tin Order No: 22-05-1**XX**1
Gold Order No: 22-12-1**XX**1
Replace **XX** with number of circuits, 02-20

Ordering Information 6494

Standard Void 2nd Circuit.
For Ordering Information Contact Factory

Dimensions 3202/3094/6494

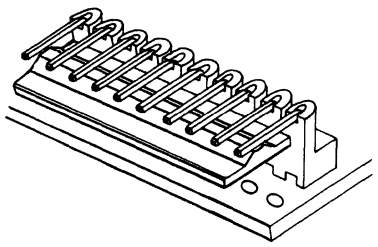
Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.185 ± .008 4,70 ± 0,20	6	.578 ± .009 14,70 ± 0,23	10	.972 ± .010 24,70 ± 0,25	14	1.367 ± .011 34,70 ± 0,28	18	1.760 ± .013 44,70 ± 0,33
3	.284 ± .008 7,20 ± 0,20	7	.677 ± .009 17,20 ± 0,23	11	1.071 ± .010 27,20 ± 0,25	15	1.462 ± .012 37,20 ± 0,30	19	1.858 ± .013 47,20 ± 0,32
4	.382 ± .008 9,70 ± 0,20	8	.776 ± .009 19,70 ± 0,23	12	1.169 ± .011 29,70 ± 0,28	16	1.563 ± .012 39,70 ± 0,30	20	1.957 ± .014 49,70 ± 0,36
5	.480 ± .008 12,20 ± 0,20	9	.874 ± .009 22,20 ± 0,23	13	1.268 ± .011 32,20 ± 0,28	17	1.662 ± .012 42,20 ± 0,30		

.098" (2,5 mm) Center Headers

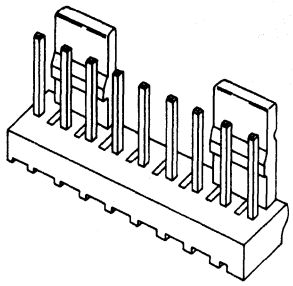
5046/5045 Series
Square Pin Friction Lock

- 2-20 Circuits
- .025" (0,64mm) square wire pins
- Friction lock
- 94V-0 white nylon
- Mates with 5051 housing
- Mates with KK .098" (2,5mm) insulation displacement connectors

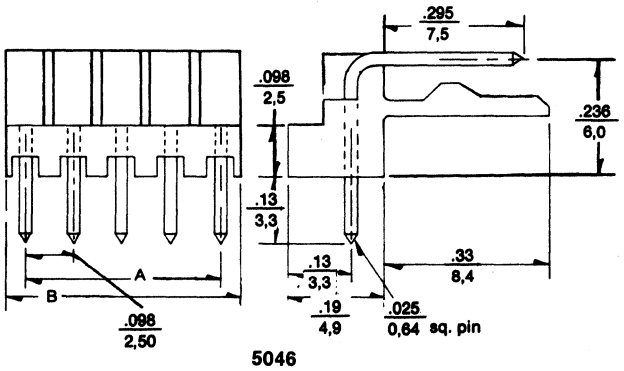
E



5046 Series
Right Angle Friction-Lock Header Assembly

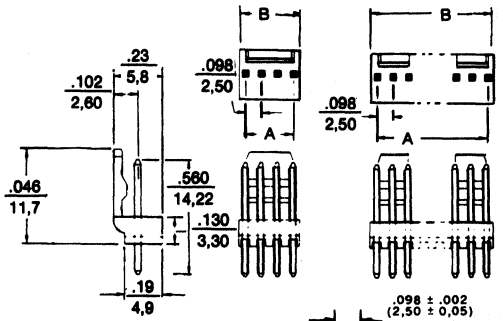


5045 Series
Polarizing Locking Header Assembly

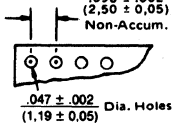


5046

Typical 2 through 5 circuits Typical 6 through 17 circuits



5045



Recommended P.C. Board Hole Dimensions

inches
mm

Dimensions 5046/5045

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.098 ± .010 2.50 ± 0,10	.177 4,50	7	.591 ± .012 15,0 ± 0,30	.669 ± .012 17,0 ± 0,30	12	1.083 ± .014 27,50 ± 0,35	1.161 ± .014 29,50 ± 0,35	17	1.574 ± .014 40,00 ± 0,35	1.653 ± .014 42,00 ± 0,35
3	.197 ± .006 5,00 ± 0,15	.276 7,00	8	.689 ± .012 17,5 ± 0,30	.768 ± .012 19,5 ± 0,30	13	1.181 ± .014 30,00 ± 0,35	1.260 ± .014 32,00 ± 0,35	18	1.673 ± .014 42,50 ± 0,35	1.752 ± .014 44,50 ± 0,35
4	.295 ± .006 7,50 ± 0,15	.374 9,50	9	.787 ± .012 20,0 ± 0,30	.866 ± .012 22,0 ± 0,30	14	1.279 ± .014 32,50 ± 0,35	1.358 ± .014 34,50 ± 0,35	19	1.772 ± .014 45,00 ± 0,35	1.850 ± .014 47,00 ± 0,35
5	.394 ± .010 10,0 ± 0,25	.472 12,0	10	.886 ± .014 22,5 ± 0,35	.964 ± .014 24,5 ± 0,35	15	1.378 ± .014 35,00 ± 0,35	1.457 ± .014 37,00 ± 0,35	20	1.870 ± .014 47,50 ± 0,35	1.949 ± .014 49,50 ± 0,35
6	.492 ± .010 12,5 ± 0,25	.571 14,5	11	.984 ± .014 25,0 ± 0,35	1.063 ± .014 27,0 ± 0,35	16	1.476 ± .014 37,50 ± 0,35	1.555 ± .014 39,50 ± 0,35			

Ordering Information 5046

Tin Order No. • 22-05-1XX2
Gold Order No. 22-12-1XX2
Replace XX with number of circuits, 02-20

Ordering Information 5045

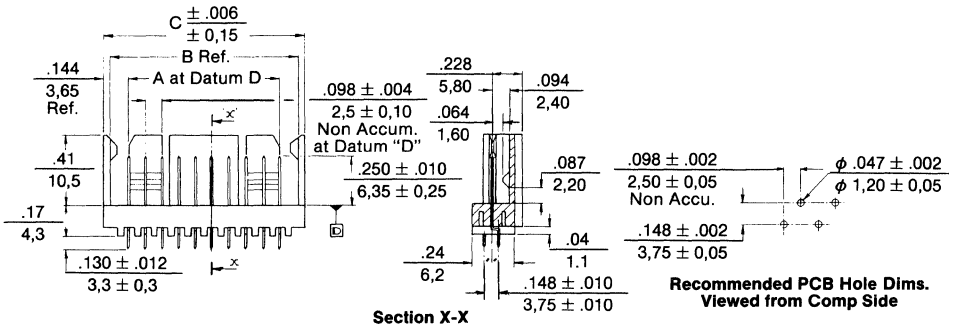
Tin Order No. • 22-04-1XX1
Gold Order No. 22-11-1XX1
Replace XX with number of circuits, 02-20

•U.S. Standard Product, available through Molex franchised distributors

.098" (2,5 mm) Center Headers

90293 Series
Staggered Tail, Shrouded Header

- 2-20 circuits
- Mates with Molex 7534, 5102 and 7795 Series connectors
- Insulator material 94V-0 polyester; color, white
- Pin push-out force 2 lbs. (0,907 kg)
- Recommended PC board thickness .060 (1,5mm)
- Pins: .025" square brass, pre-plated electro-tin over copper
- Current rating: 5 amps D.C. at 30° rise over ambient

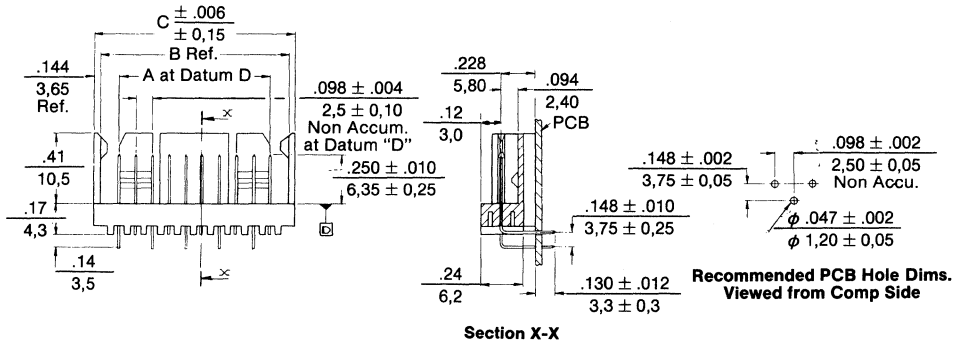


Ordering Information

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	90293-0022	6	90293-0026	9	90293-0029	12	90293-0032	15	90293-0035	18	90293-0038
3	90293-0023	7	90293-0027	10	90293-0030	13	90293-0033	16	90293-0036	19	90293-0039
4	90293-0023	8	90293-0028	11	90293-0031	14	90293-0034	17	90293-0037	20	90293-0040
5	90293-0024										

90298 Series
Right Angle, Staggered Tail Shrouded Headers

- Specifications and dimensions same as 90293



Dimensions 90293 and 90298

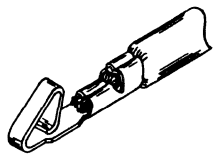
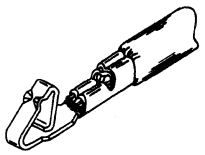
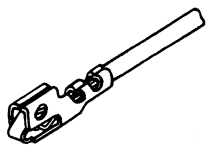
Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
2	.098 2,50	.307 7,80	.386 9,80	9	.787 20,00	.996 25,30	1.075 27,30	15	1.378 35,00	1.587 40,30	1.665 42,30
3	.187 5,00	.406 10,30	.484 12,30	10	.886 22,50	1.094 27,80	1.173 29,80	16	37,50 1.476	42,80 1.685	44,80 1.764
4	.295 7,50	.504 12,80	.583 14,80	11	.984 25,00	1.193 30,30	1.272 32,30	17	1.575 40,00	1.783 45,30	1.862 47,30
5	.394 10,00	.602 15,30	.681 17,30	12	1.083 27,50	1.291 32,80	1.370 34,80	18	1.673 42,50	1.882 47,80	1.961 49,80
6	.492 12,60	.701 17,80	.780 19,80	13	1.181 30,00	1.390 35,30	1.469 37,30	19	1.772 45,00	1.980 50,30	2.059 52,30
7	.591 15,00	.799 20,30	.878 22,30	14	1.280 32,50	1.488 37,80	1.567 39,80	20	1.870 47,50	2.079 52,80	2.157 54,80
8	.689 17,50	.898 22,80	.976 24,80								

Ordering Information

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	90298-0002	6	90298-0006	9	90298-0009	12	90298-0012	15	90298-0015	18	90298-0018
3	90298-0003	7	90298-0007	10	90298-0010	13	90298-0013	16	90298-0016	19	90298-0019
4	90298-0004	8	90298-0008	11	90298-0011	14	90298-0014	17	90298-0017	20	90298-0020
5	90298-0005										

KK .100" (2,54 mm) Centerline Connector System

Crimp Terminals

	Series No.	Plating	Order No. (Loose)	Order No. (Chain)
	**STANDARD CANTILEVER TERMINAL**			
	2759 (22-30 AWG wire) Brass	Tin Gold Select Gold	• 08-50-0114 • 08-56-0110[1] • 08-55-0102[2]	• 08-50-0113 • 08-56-0109[1] • 08-55-0101[2]
	6459 (22-30 AWG wire) Phosphor Bronze	Tin Gold Select Gold	• 08-52-0123 • 08-65-0814[1] • 08-65-0816[2]	• 08-52-0101 • 08-65-0813[1] • 08-65-0815[2]
	**"CAT EAR" CANTILEVER TERMINAL**			
	41572 (22-30 AWG wire)	Tin	08-65-0805	08-65-0804
	**HIGH PRESSURE BOX TERMINAL**			
	7879 (22-30 AWG wire)	Tin Select Gold	• 08-50-0005 08-55-0129[2]	• 08-50-0004 08-55-0124[2]
	40144 (32-36 AWG wire)	Select Gold	N/A	08-55-0118[2]

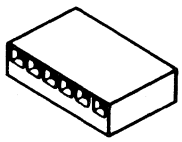
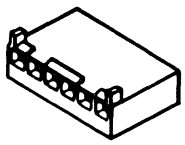
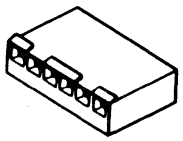
NOTES: [1] 15 microinch select gold with overall gold flash. [2] 15 microinch select gold.

Crimp Tooling

Series No. AWG	Hand Tools	Mini-Mac Die*	TM40 Die*	TM40 Press & Die
2759 (22-30 AWG wire)	11-26-0009	11-18-2001	11-40-2100	11-04-0426
41572 (22-30 AWG wire)	11-26-0009	11-18-2001	11-40-2100	11-04-0426
7879 (22-30 AWG wire)	11-01-0037	11-18-2038	11-40-2037	11-04-0273
40144 (32-36 AWG wire)	11-01-0103	11-18-2039	11-40-2038	11-04-0275

* Die only, does not include press & spare tooling.

.100" (2,54mm) Centerline Crimp Housings

	Options	Order No.
	Without Polarizing Ribs or Locking Ramp	**2695 Series** **• 22-01-2XX1*** 7880 Series 10-01-2XX9**
	With Polarizing Ribs and Locking Ramp	**2695 Series** **• 22-01-3XX7***
	With Locking Ramp Only	**2695 Series** **• 22-01-2XX7*** 7880 Series 10-11-2XX3**

2695 Crimp Housing accepts 2759 and 41572 Terminals ONLY.
Circuits 1-25 available, 26-28 non standard product

7880 Crimp Housing accepts 7879 and 40144 Terminals ONLY.
Circuits 1-28 available

*Polarizing key for 2695 Crimp Housing and PC Connectors. Order No. 15-04-9209
**Polarizing key for 7880 Crimp Housing. Order No. 89-00-0422
• U.S. Standard Product, available through Molex franchised distributors

.100" (2,54 mm) Center Crimp Terminal Housing

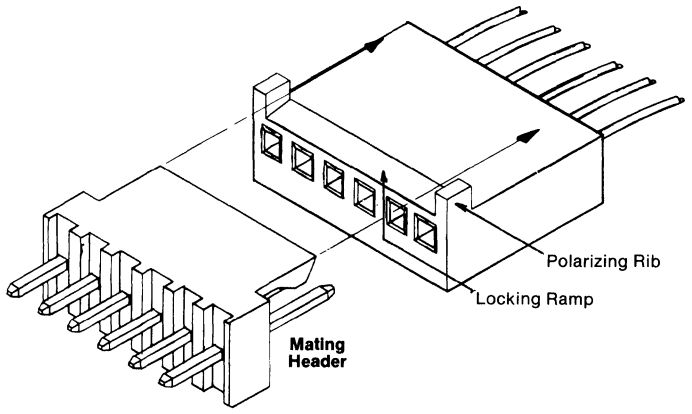
2695/6471 Series
Housing

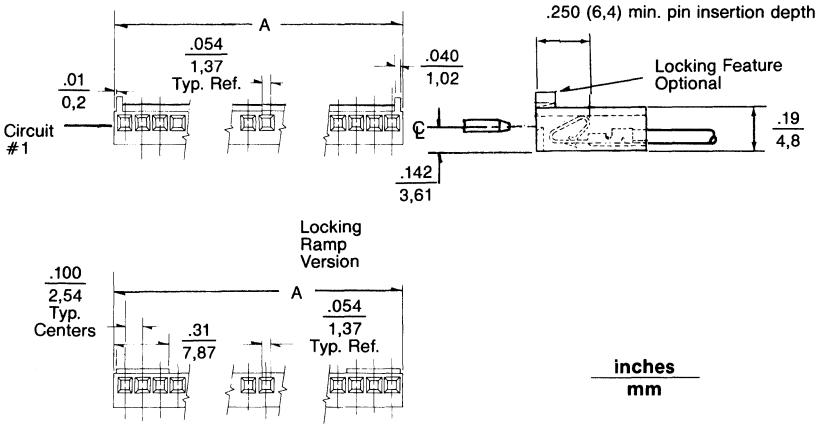
- 2695 Series uses 2759 terminal only.
- 6471 Series uses 4809C **anti-fishhooking** terminal
- 6471 is end-to-end stackable (two housings only)
- 2695 version with or without locking ramp
- Dyed product (2695) is 6663. Contact factory
- Red nylon - 2695/94V-0 - White nylon - 6471
- 2-25 Circuits available - 6471
  1-25 Circuits available - 2695
- Optional polarization or locking ramp version available on 2695 only

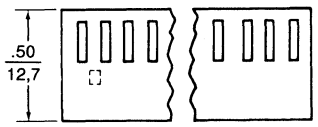
Mating Headers for **2695/6471**

4030	6373	42152	70475
4380	6410	42153	70021
4094	70327	42375	
7478	7395	42376	

Also mates with .025" (0,64mm) pins







Polarizing Key

Order No. 15-04-9209

Polarizing Peg

Order No. 15-04-9210

Dimensions 2695/6471

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
1	.122 3,10	6	.62 15,8	10	1.02 25,9	14	1.42 36,1	18	1.82 46,2	22	2.22 56,4
2	.22 5,6	7	.72 18,3	11	1.12 28,5	15	1.52 38,6	19	1.92 48,8	23	2.32 59,9
3	.32 8,1	8	.82 20,9	12	1.22 31,0	16	1.62 41,2	20	2.02 51,3	24	2.42 61,5
4	.42 10,7	9	.92 23,4	13	1.32 33,5	17	1.72 43,7	21	2.12 53,9	25	2.52 64,0
5	.52 13,2										

Ordering Information 2695 (Preferred version in the Americas)

With Locking Ramp Order No. • 22-01-2**XX**7	Without Locking Ramp or Ribs Order No. • 22-01-2**XX**1
With Locking Ramp and Polarizing Ribs Order No. • 22-01-3**XX**7	Replace **XX** with number of circuits, 01-25
Replace **XX** with number of circuits, 02-25	

• U.S. Standard Product, available through Molex franchised distributors

Ordering Information 6471
(Preferred version in Europe and the Far East)

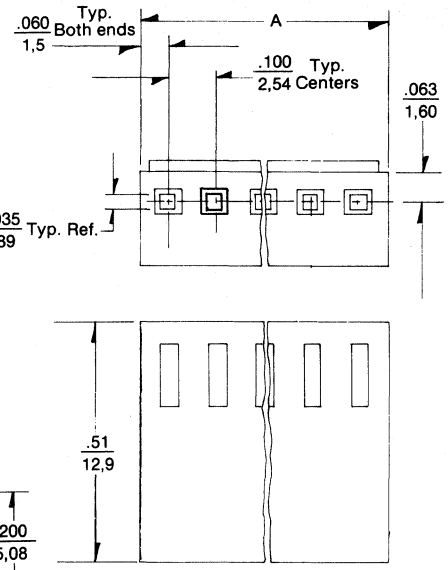
With Locking Ramp & Polarizing Ribs Order No. 22-01-2**XX**5
Replace **XX** with number of circuits, 02-18

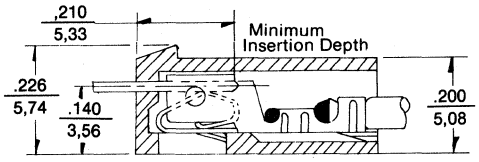
For Circuits 19 to 28, Contact Factory

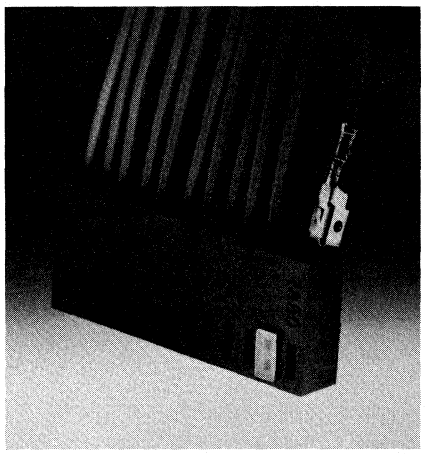
.100" (2,54 mm) Center Crimp Terminal Housing

7880 Series
High Pressure Terminal Housing

- Use with 7879 series terminal only. Order separately, see below
- 1-28 Circuits
- Standard with locking ramp
- 94V-0 material
- Side insertable polarizing key 8780-1. See Ordering Information below
- Mates with .025" (0,64mm) Pins







Mates with
Headers: Series 4030, 4180, 4380, 4094, 42152, 42153, 42375, 42376, 6373, 6410, 7478, 70021, 7395, 70327, 70475, 70345
Pins*: Series 2231, 2766, 4166 and 6641
*Pins require .100" spacing on printed board

inches
mm

Dimensions 7880

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
1	.12 3,0	6	.62 15,8	11	1.12 28,5	16	1.62 41,2	21	2.12 53,9	25	2.62 64,0
2	.22 5,6	7	.72 18,3	12	1.22 31,0	17	1.72 43,7	22	2.22 56,4	26	2.62 66,6
3	.32 8,1	8	.82 20,8	13	1.32 33,5	18	1.82 46,2	23	2.32 59,9	27	2.72 69,1
4	.42 10,7	9	.92 23,4	14	1.42 36,1	19	1.92 48,8	24	2.42 61,5	28	2.82 71,6
5	.52 13,2	10	1.02 25,9	15	1.52 38,6	20	2.02 51,3				

Ordering Information 7880

Order No. • 10-11-2XX3
Replace **XX** with number of circuits, 01-28

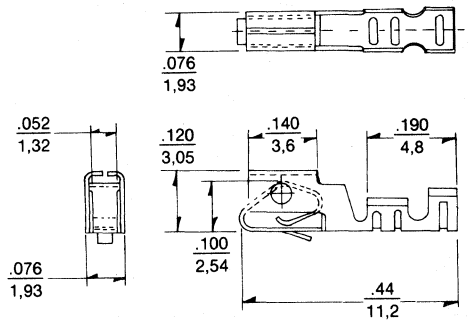
• U.S. Standard Product, available through Molex franchised distributors

Polarizing Key	
Eng. No.	Order No.
8780-1	89-00-0422

In the **Far East** this housing has a different Engineering Series No. and different order numbers.

High Pressure Crimp Terminals

- Use with 7880 series housing
- Up to 425 grams normal force
- Multiple contacting points
- Patented double cantilever with box shroud
- Accepts #22 to 30 AWG wire, .062" (1,58) max. insulation dia.
- Crimping die or hand tool available



Ordering Information

Eng. Series	Wire Size	Insulation Diameter	Plating	Loose Order No.	Reel Order No.	Crimp Die Order No.	Hand Crimp Tool Order No.
7879	22-30	.062 1,57 Max.	Tin/Copper Select Gold	• 08-50-0005 08-55-0129	• 08-50-0004 08-55-0124	11-07-3037	11-01-0103
40144	32-36	.025 0,64 Max.	Select Gold	—	08-55-0118	11-07-3038	11-01-0103

• U.S. Standard Product, available through Molex franchised distributors.

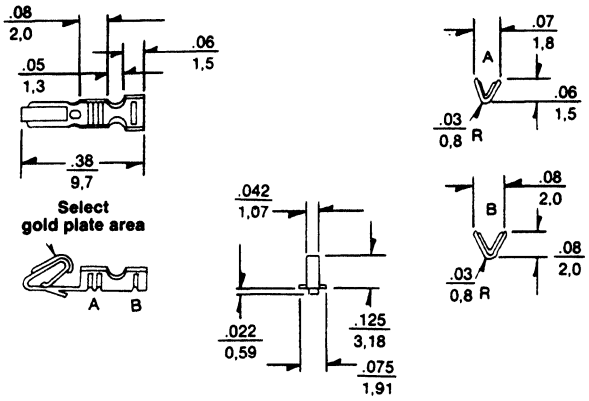
Recommended wire range assumes stranded wire.

Crimp Terminals for .098" (2,5 mm) and .100" (2,54 mm) Housings

2759/6459 Series

Crimp Terminals

- Use with 2695, 5051, 41895, 6663, 6745 series housings
- Accepts #22 to 30 AWG wire, .062" (1,58 mm) max. insulation dia.
- Available in phos. bronze material. See 6459 Series



E

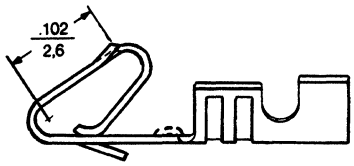
Ordering Information 2759 (Preferred version in the Americas)

Eng. No.	Wire Size	Insulation O.D.	Tin Plating		Gold Plating		Selective Gold Plating	
			Loose Order No.	Chain Order No.	Loose Order No.	Chain Order No.	Loose Order No.	Chain Order No.
2759	22-30	.062 (1,57mm)	• 08-50-0114	• 08-50-0113	• 08-56-0110	• 08-56-0109	• 08-55-0102	• 08-55-0101
6459	22-30	.062 (1,57mm)	• 08-52-0123	• 08-52-0101	• 08-65-0814	• 08-65-0813	• 08-65-0816	• 08-65-0815

40445/41572 Series

Cat Ear Terminals

- Similar to 2759 Series with cat ears
- Use with 5051, 3071, 3072, 3180, and 2695 series housings
- Accepts #22-30 AWG wire



Ordering Information 40445
(Preferred version in Europe)

Hot Tin/Lead Dip Plating	
Loose Order No.	Chain Order No.
97-00-0445	97-00-0444

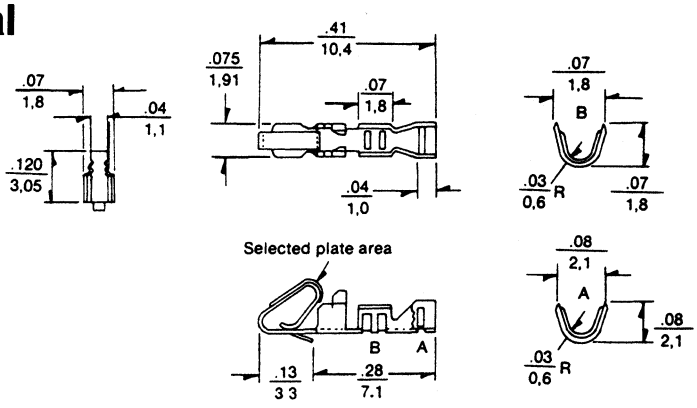
Ordering Information 41572
(Preferred version in the Americas)

Hot Tin/Lead Dip Plating	
Loose Order No.	Chain Order No.
08-65-0805	08-65-0804

4809 Series

Anti-Fishhooking Crimp Terminal

- Avoids tangling at preassembly
- Use with 5051 and 6471 series housings
- Accepts #22 to 30 AWG wire
- Available with cat ears



Ordering Information 4809

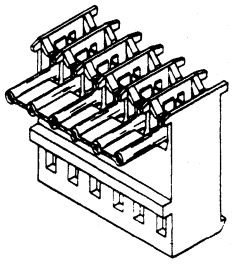
Crimp Wire Size	Insulation Diameter	Eng. No.	Tin/Lead (with cat ears)	
			Loose Order No.	Chain Order No.
22-30	.062 1,57 Max.	4809	08-50-0032	08-50-0031

KK .100" (2,54 mm) Centerline Connector System

E

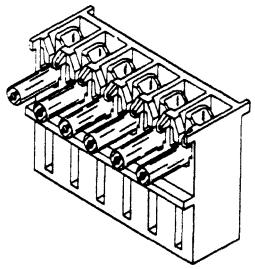
.100" Centerline Insulation Displacement Connectors

7720 SERIES Feed Through



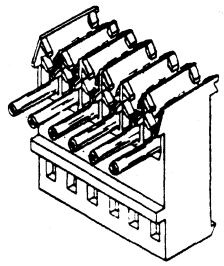
Option	Order No. (Circuits 2-28)
No Ramp	22-26-7XXC
Ramp	22-26-8XXC
Rib and Ramp	22-26-9XXC

7720 SERIES Feed To



Option	Order No. (Circuits 2-28)
No Ramp	22-41-3XXC
Ramp	22-41-4XXC
Rib and Ramp	22-41-5XXC

7690 SERIES Harness Board



Option	Order No. (Circuits 2-28)
No Ramp	22-26-3XXC
Ramp	22-26-5XXC
Rib and Ramp	22-26-6XXC

Replace XX with circuit size. Replace C with 1 or 2 for required wire size from chart below. Standard plating is tin, contact factory for other options.
Polarizing key for 7720 and 7690. Order No. • 15-04-0292.

Wire Size and Color Code Chart

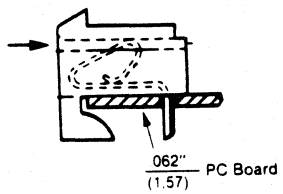
Ordering Suffix No.	Color Code	Type of Wire Terminated All Wires to have a MAXIMUM DIAMETER of 0.060" (1,52mm)
22-XX-XXX1	Brown	#28 AWG solid, stranded, fused, and #26 AWG solid, stranded
22-XX-XXX2	Green	#26 AWG fused and #24 AWG solid, stranded, fused.

.100" Centerline Insulation Displacement Tooling

Description	Order No.
"T" handle discrete wire hand tool for prototype or repair	11-02-0016
Discrete wire terminator handgun for low volume, prototype, field applic. and repair	11-21-5194
Pneumatic bench terminator for low volume use, uses modules from handgun	11-20-0739
Snap-on module die for handgun, automatic indexing after insertion of discrete wire	11-21-5197
Semi-automatic Mini Cam III auto index, operator controlled, conveyor fed. Air operation	11-20-0954
Semi-automatic Mini Cam III auto index, operator controlled, conveyor fed. Electric operation	11-20-0688 (110 volt) 11-20-0689 (220 volt)
Harness board discrete wire hand held pneumatic terminator. (7690 only)	11-20-0295
Harness board discrete wire cut off and test fixture	11-20-0294
Harness board discrete wire test fixture	11-20-0307

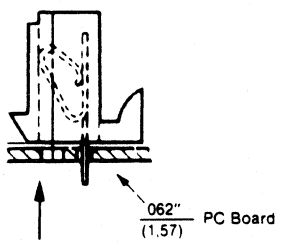
.100" Centerline Printed Circuit Board Connectors

4455 SERIES Right Angle Pin Entry



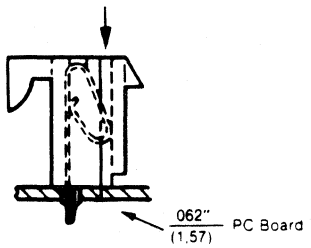
Plating	Order No. (Circuits 2-25)
Tin	• 22-15-2XX6
Select Gold	• 22-16-2XX0[1]

4455 SERIES Bottom Pin Entry



Plating	Order No. (Circuits 2-25)
Tin	• 22-14-2XX4
Select Gold	• 22-17-3XX2[1]

4455 SERIES Top Pin Entry

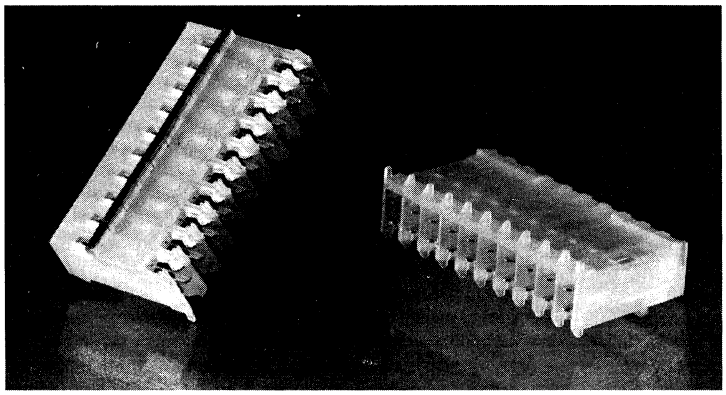


Plating	Order No. (Circuits 2-28)
Tin	• 22-02-2XX5
Select Gold	• 22-18-2XX1[1]

Replace XX with circuit size. • U.S. Standard Product, available through Molex franchised distributors. **NOTE:** [1] 15 microinch select gold

.100" (2,54 mm) Center Insulation Displacement Standard Connector

7720 Series
Dual Contact



- 2-28 Circuits
- 2 Points of contact
- Feed to and feed thru versions available
- Standard with locking ramp
- End-to-end polarization optional
- Molded in strain reliefs
- Accepts wire O.D. from .036" (0.91mm) to .058" (1,47mm) max
- Mates with standard .025" (0,64mm) square .100" (2,54mm) centerline headers
- UL recognized (File #E29179)



Universal Polarizing Key
Order No. 15-04-0292

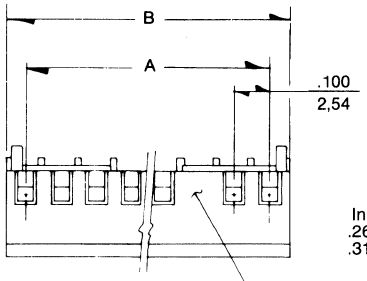


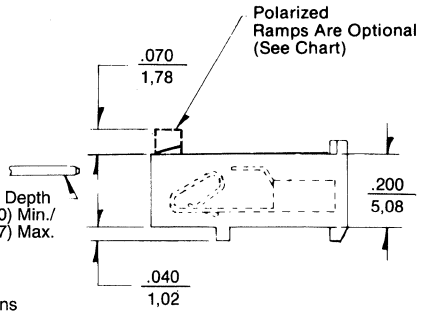
Headers

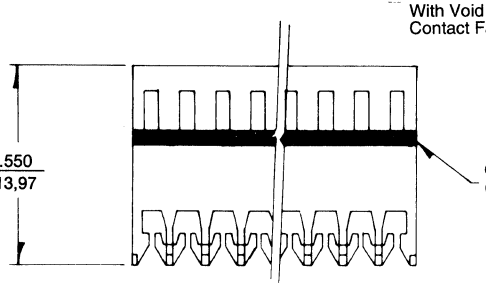
4030	42375	7395
4094	42376	7478
4180	6410	7832
42152	6373	70327
42153		



Covers
7841-A Feed Thru
7841-B Feed To







inches
mm

MATERIAL:
Housing: Nylon 94V-2 Color: Natural
Terminal: Brass, Tin Plated

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.214 5,44	8	.700 17,78	.814 20,68	14	1.300 33,02	1.414 35,92	19	1.800 45,72	1.914 48,62	24	2.300 58,42	2.414 61,32
3	.200 5,08	.314 7,98	9	.800 20,32	.914 23,22	15	1.400 35,56	1.514 38,46	20	1.900 48,26	2.014 51,16	25	2.400 60,92	2.514 63,86
4	.300 7,62	.414 10,52	10	.900 22,86	1.014 25,76	16	1.500 38,10	1.614 41,00	21	2.000 50,80	2.114 53,70	26	2.500 63,50	2.614 66,40
5	.400 10,16	.514 13,06	11	1.000 25,40	1.114 28,30	17	1.600 40,64	1.714 43,54	22	2.100 53,34	2.214 56,24	27	2.600 66,04	2.714 68,94
6	.500 12,70	.614 15,60	12	1.100 27,94	1.214 30,84	18	1.700 43,18	1.814 46,08	23	2.200 55,88	2.314 58,78	28	2.700 68,58	2.814 71,48
7	.600 15,24	.714 18,14	13	1.200 30,48	1.314 33,38									

Ordering Information (All new design-ins recommend 40555/41162)

ORDERING NUMBER FORMULA

FEED THRU
22-26 - X XX X

- No Ramp - 7
- Ramp - 8
- Polarized Ramp - 9
- Number of Circuits 02-28
- Wire Size and Color Code (See Chart 1)

CHART 1 (General Reference*)			
Ordering Suffix No.		Color	Type of Wire Terminated [All wires have a maximum insulation Diameter of .058" (1,47mm) max.]
Feed Thru	Feed To		
22-26-XXX1	22-41-XXX1	Brown	#26 AWG Stranded and Solid and #28 AWG Solid, Stranded and Fused
22-26-XXX2	22-41-XXX2	Green	#24 AWG Solid and Fused, #26 AWG Fused

*Some wires require deviation from chart.

ORDERING NUMBER FORMULA

FEED TO
22-41 - X XX X

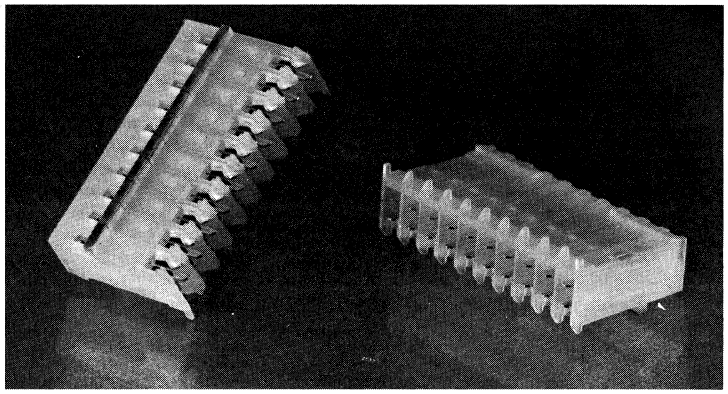
- No Ramp - 3
- Ramp - 4
- Polarized Ramp - 5
- Number of Circuits 02-28
- Wire Size and Color Code (See Chart 1)

Recommended Molex ribbon cable for use with 7720 Series:
Eng. Nos. 7234, 7307, 24241, 24226, 7767, 8996, 8997, 24214.



.100" (2,54 mm) Center Insulation Displacement Standard Connector

40555 Series
Dual Contact



- 2-28 Circuits
- Heavy duty end walls for terminal support
- Preferred over Molex 7720 21-41-XXX2
- Standard with locking ramp
- End to end polarization optional
- Molded in strain reliefs
- Accepts wire O.D. from .036" (0.91mm) to .058" (1,47mm) max.
- Mates with standard .025" (0.64mm) square .100" (2,54mm) centerline headers
- UL recognized (File #E29179)

E

Universal Polarizing Key
Order No. 15-04-0292

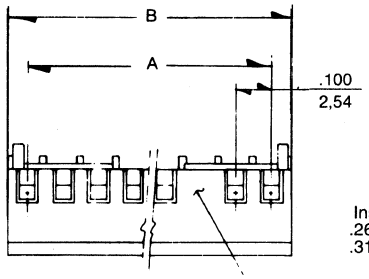


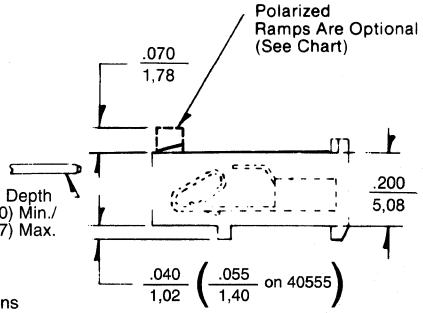
Headers

4030	42375	7395
4094	42376	7478
4180	6410	7832
42152	6373	70327
42153		

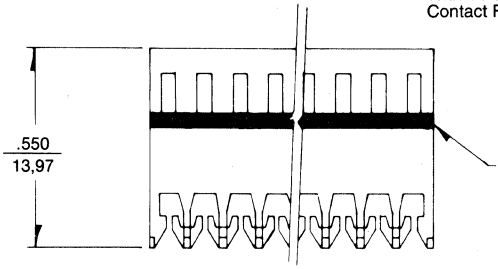


Covers
7841-A Feed Thru
41162 only





For Connectors
With Void Locations
Contact Factory



inches
mm

MATERIAL:
Housing: Nylon 94V-2 Color: Natural
Terminal: Copper Alloy Tin Plated

Dimensions

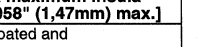
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.214 5,44	8	.700 17,78	.814 20,68	14	1.300 33,02	1.414 35,92	19	1.800 45,72	1.914 48,62	24	2.300 58,42	2.414 61,32
3	.200 5,08	.314 7,98	9	.800 20,32	.914 23,22	15	1.400 35,56	1.514 38,46	20	1.900 48,26	2.014 51,16	25	2.400 60,92	2.514 63,86
4	.300 7,62	.414 10,52	10	.900 22,86	1.014 25,76	16	1.500 38,10	1.614 41,00	21	2.000 50,80	2.114 53,70	26	2.500 63,50	2.614 66,40
5	.400 10,16	.514 13,06	11	1.000 25,40	1.114 28,30	17	1.600 40,64	1.714 43,54	22	2.100 53,34	2.214 56,24	27	2.600 66,04	2.714 68,94
6	.500 12,70	.614 15,60	12	1.100 27,94	1.214 30,84	18	1.700 43,18	1.814 46,08	23	2.200 55,88	2.314 58,78	28	2.700 68,58	2.814 71,48
7	.600 15,24	.714 18,14	13	1.200 30,48	1.314 33,38									

Ordering Information (Preferred version in the Americas)

CHART 1 (General Reference*)			
Ordering Suffix No.			Type of Wire Terminated [All wires have a maximum Insulation Diameter of .058" (1,47mm) max.]
Feed To	Series	Color	
22-41-9XXX	40555	Green	#26 AWG Fused/Topcoated and 24 AWG Solid, Stranded and Fused/Topcoated

*Some wires require deviation from chart

Recommended Molex ribbon cable for use with 40555 Series:
Eng Nos. 24226, 8996, 8997



ORDERING NUMBER FORMULA

FEED TO
22-41 - 9 XX X

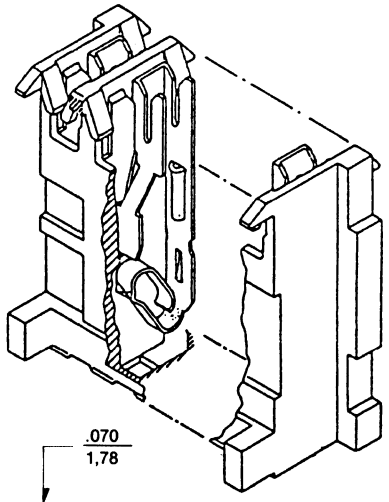
Number of Circuits
02-28

No Ramp - 2
Ramp - 5
Polarized Ramp - 8

.100" (2,54 mm) Center Insulation Displacement Standard Connector

7720S Series
High Pressure "Cat Ear" Contact System

- 2-17 Circuits
- Standard with locking ramp
- Feed-to and feed-thru versions available
- Molded in strain reliefs
- Accepts wire O.D. from .030" (0.76mm) to .056" (1,42mm) max.
- Accepts solid and stranded wire
- Mates with standard .100" center (2,54mm) headers
- UL recognized
- 5 microns tin (preplate) on terminals





Headers

4030	7478
4094	7832
4180	42152
4380	42153
6373	42375
6410	42376
7395	70327

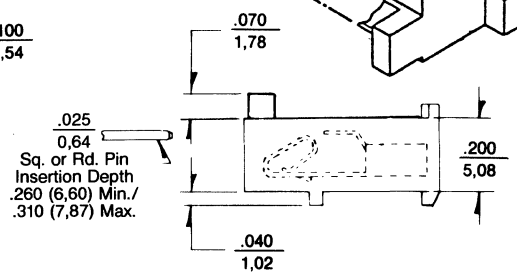


Covers

7841-A Feed Thru
7841-B Feed To



Universal Polarizing Key
Order No. 15-04-0292



inches
mm

MATERIAL:
Housing: Nylon 94V-2 Color: Natural
Terminal: Brass, Tin Plated

Dimensions

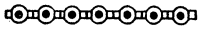
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.214 5,44	6	.500 12,70	.614 15,60	9	.800 20,32	.914 23,22	12	1.100 27,94	1.214 30,84	15	1.400 35,56	1.514 38,46
3	.200 5,08	.314 7,98	7	.600 15,24	.714 18,14	10	.900 22,86	1.014 25,76	13	1.200 30,48	1.314 33,38	16	1.500 38,10	1.614 41,00
4	.300 7,62	.414 10,52	8	.700 17,78	.814 20,68	11	1.000 25,40	1.114 28,30	14	1.300 33,02	1.414 35,92	17	1.600 40,64	1.714 43,54
5	.400 10,16	.514 13,06												

Ordering Information 7720S (Preferred version in Europe and the Far East)

CHART 1 (Color Identification Stripe)			
I.D. Slot Version	Order Nos.	Color	Type of Wire Terminated [All wires have a Max. Insulation Diameter of .056" (1,42mm)]
H	22-50-3025 thru -3175	Green	#24 AWG Stranded, #26 Solid and Fused and #28 Fused
J	38-00-2092 thru -2107	Brown	#26 AWG Stranded and #28 Solid and Stranded

Circuits	Version H	Circuits	Version H	Circuits	Version H	Circuits	Version H	Circuits	Version H	Circuits	Version H
2	22-50-3025	5	22-50-3055	8	22-50-3085	11	22-50-3115	14	22-50-3145	16	22-50-3165
3	22-50-3035	6	22-50-3065	9	22-50-3095	12	22-50-3125	15	22-50-3155	17	22-50-3175
4	22-50-3045	7	22-50-3075	10	22-50-3105	13	22-50-3135				

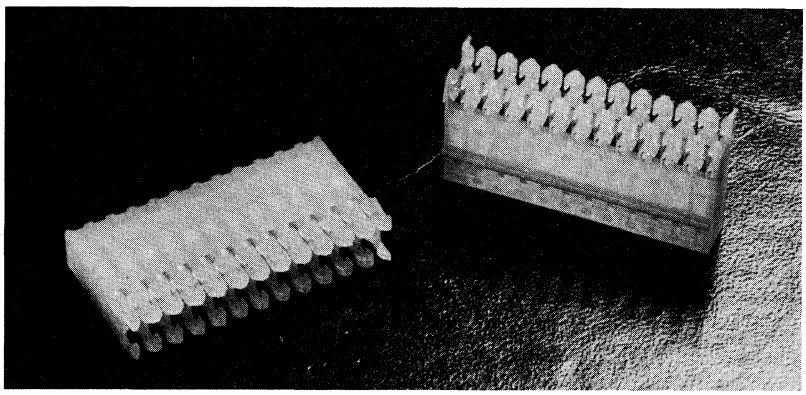
Circuits	Version J	Circuits	Version J	Circuits	Version J	Circuits	Version J	Circuits	Version J	Circuits	Version J
2	38-00-2092	5	38-00-2095	8	38-00-2098	11	38-00-2101	14	38-00-2104	16	38-00-2106
3	38-00-2093	6	38-00-2096	9	38-00-2099	12	38-00-2102	15	38-00-2105	17	38-00-2107
4	38-00-2094	7	38-00-2097	10	38-00-2100	13	38-00-2103				



Recommended Molex ribbon cable for use with 7720S Series:
Eng. Nos. 7234, 7307, 24241, 24226, 7767, 8996, 8997, 24214.

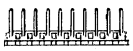
.100" (2,54 mm) Center Harness Board Connector

7690 Series
Dual Contact



- 2-28 Circuits
- 2 Points of contact
- Standard with locking ramp
- End-to-end polarization optional
- Molded in strain reliefs
- Accepts wire O.D. from .030" (0,76mm) to .060" (1,52mm) max.
- Accepts solid and stranded wire
- Mates with standard .100" center (2,54mm) headers
- UL recognized (File #E29179)

E



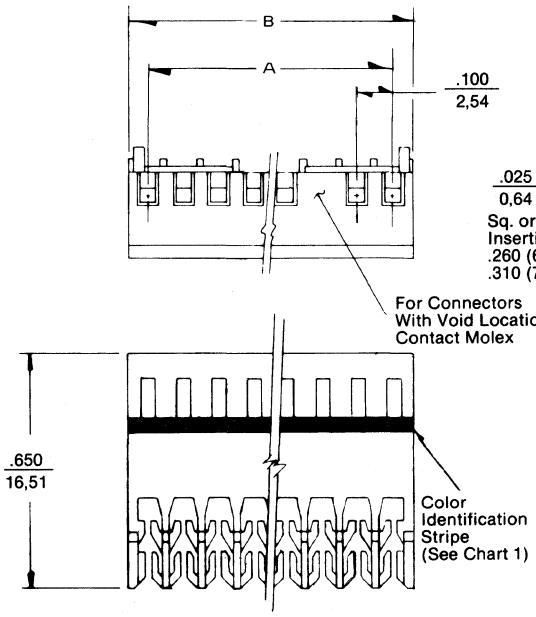
Headers

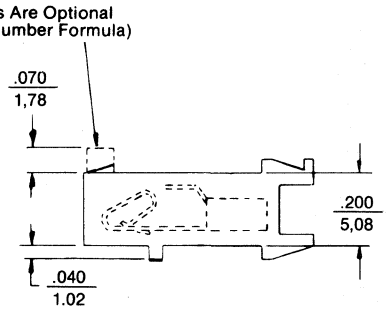
4030	7478
4094	7832
4180	42152
4380	42153
6373	42375
6410	42376



Covers
7840 Feed Thru
7840 Feed To

Polarizing Key
Order No. 89-00-3003





inches
mm

MATERIAL:
Housing: Nylon 6/6 94V-2 Color: Natural
Terminal: Brass, Tin Plated

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.214 5,44	8	.700 17,78	.814 20,68	14	1.300 33,02	1.414 35,92	19	1.800 45,72	1.914 48,62	24	2.300 58,42	2.414 61,32
3	.200 5,08	.314 7,98	9	.800 20,32	.914 23,22	15	1.400 35,56	1.514 38,46	20	1.900 48,26	2.014 51,16	25	2.400 60,92	2.514 63,86
4	.300 7,62	.414 10,52	10	.900 22,86	1.014 25,76	16	1.500 38,10	1.614 41,00	21	2.000 50,80	2.114 53,70	26	2.500 63,50	2.614 66,40
5	.400 10,16	.514 13,06	11	1.000 25,40	1.114 28,30	17	1.600 40,64	1.714 43,54	22	2.100 53,34	2.214 56,24	27	2.600 66,04	2.714 68,94
6	.500 12,70	.614 15,60	12	1.100 27,94	1.214 30,84	18	1.700 43,18	1.814 46,08	23	2.200 55,88	2.314 58,78	28	2.700 68,58	2.814 71,48
7	.600 15,24	.714 18,14	13	1.200 30,48	1.314 33,38									

Ordering Information (Preferred version in the Americas)

ORDERING NUMBER FORMULA

22-26 - X XX X

- No Ramp - 3
- Ramp - 5
- Polarized Ramp - 6
- Number of Circuits 02-28
- Wire Size and Color Code (See Chart 1)

CHART 1 (General Reference*)		
Ordering Suffix No.	**Color**	**Type of Wire Terminated [All wires have a maximum Insulation Diameter of .060" (1,52mm)]**
22-26-XXX1	Brown	#26 AWG Stranded, #26 AWG Solid, and #28 AWG Solid, Stranded and Fused
22-26-XXX2	Green	#24 AWG Solid, Stranded and Fused and #26 AWG Fused

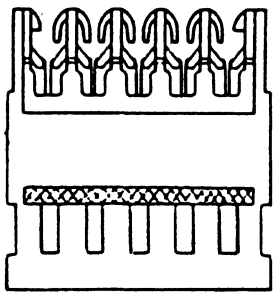
*Some wires require deviation from chart.

.100" (2,54 mm) Center Harness Board Connector

7690S Series

Higher Pressure "Cat Ear" Contact System

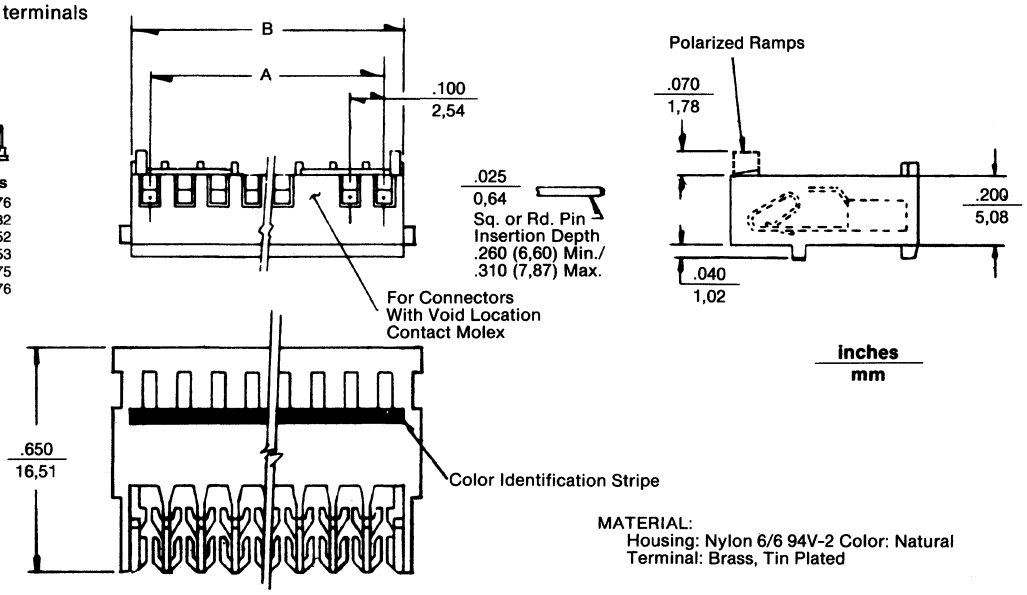
- 2-28 Circuits
- Standard with locking ramp
- Molded in strain reliefs
- Accepts wire O.D. from .030" (0,76mm) to .056" (1,42mm) max.
- Accepts solid and stranded wire
- Mates with standard .100" (2,54mm) headers, see list below
- UL recognized
- 5 microns tin (preplate) on terminals





Mating Headers

4030	7476
4094	7832
4180	42152
4380	42153
6373	42375
6410	42376



inches
mm

MATERIAL:
Housing: Nylon 6/6 94V-2 Color: Natural
Terminal: Brass, Tin Plated

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.214 5,44	8	.700 17,78	.814 20,68	14	1.300 33,02	1.414 35,92	19	1.800 45,72	1.914 48,62	24	2.300 58,42	2.414 61,32
3	.200 5,08	.314 7,98	9	.800 20,32	.914 23,22	15	1.400 35,56	1.514 38,46	20	1.900 48,26	2.014 51,16	25	2.400 60,92	2.514 63,86
4	.300 7,62	.414 10,52	10	.900 22,86	1.014 25,76	16	1.500 38,10	1.614 41,00	21	2.000 50,80	2.114 53,70	26	2.500 63,50	2.614 66,40
5	.400 10,16	.514 13,06	11	1.000 25,40	1.114 28,30	17	1.600 40,64	1.714 43,54	22	2.100 53,34	2.214 56,24	27	2.600 66,04	2.714 68,94
6	.500 12,70	.614 15,60	12	1.100 27,94	1.214 30,84	18	1.700 43,18	1.814 46,08	23	2.200 55,88	2.314 58,78	28	2.700 68,58	2.814 71,48
7	.600 15,24	.714 18,14	13	1.200 30,48	1.314 33,38									

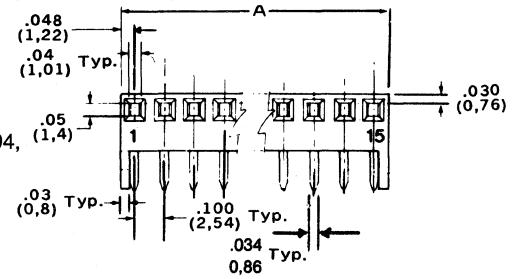
Ordering Information (Preferred version in Europe and the Far East)

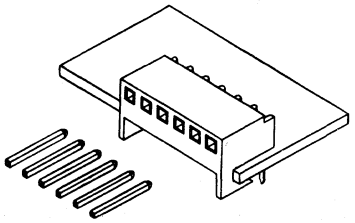
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	38-00-2392	9	38-00-2399	16	38-00-2406	23	38-00-2413
3	38-00-2393	10	38-00-2400	17	38-00-2407	24	38-00-2414
4	38-00-2394	11	38-00-2401	18	38-00-2408	25	38-00-2415
5	38-00-2395	12	38-00-2402	19	38-00-2409	26	38-00-2416
6	38-00-2396	13	38-00-2403	20	38-00-2410	27	38-00-2417
7	38-00-2397	14	38-00-2404	21	38-00-2411	28	38-00-2418
8	38-00-2398	15	38-00-2405	22	38-00-2412		

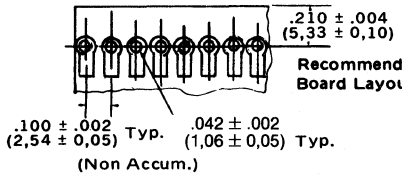
.100" (2,54 mm) Center P.C. Board Connectors

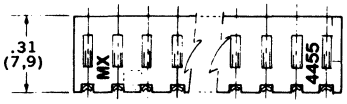
4455-AC Series
41765-A Series
Side Entry Type A

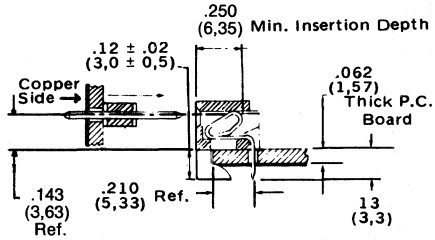
- 2-25 Circuits
- Right angle mount
- 4455 - 94V-0 nylon
  41765 - 94V-0 polyester
- Mates with Molex 4030, 4380, 4180, 4094, 42375, 42376, 42152 & 42153 headers and .025" square pins
- End-to-end stackable











For Dimensional Information Use Table on Next Page

Ordering Information (Preferred version in the Americas)

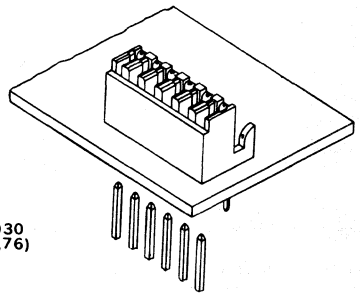
Plating Option	4455-AC	41765-A
Tin Order No.	• 22-15-2XX6	22-15-6XX3
Gold Order No.	• 22-16-2XX1	—
Select Gold Order No.	• 22-16-2XX0	22-15-7XX3
Replace XX with number of circuits, 02-25		

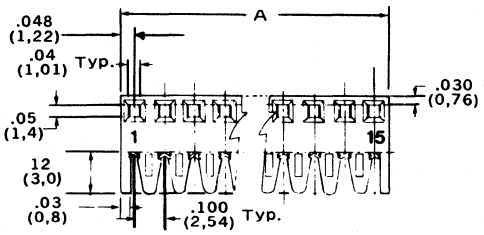
4161-1 Polarizing Key for 4455 AC and CC	
Order No.	15-04-9209

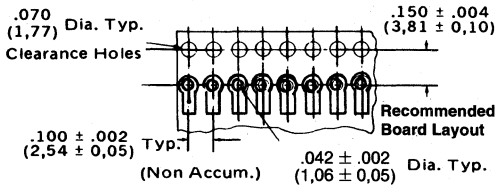
• U.S. Standard Product available through Molex franchised distributors.

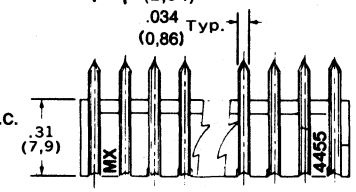
4455-BC Series
41765-B Series
Bottom Entry Type B

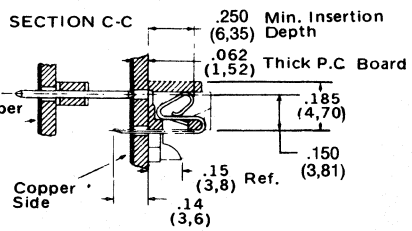
- 2-25 Circuits - 4455
  2-15 Circuits - 41765
- Bottom entry mount
- 4455 - 94V-0 nylon
  41765 - 94V-0 polyester
- Mates with Molex 4030, 4180, 4380, 4094, 42375, 42376, 42152 & 42153 headers and .025" square pins
- End-to-end stackable











For Dimensional Information Use Table on Next Page

Ordering Information (Preferred version in the Americas)

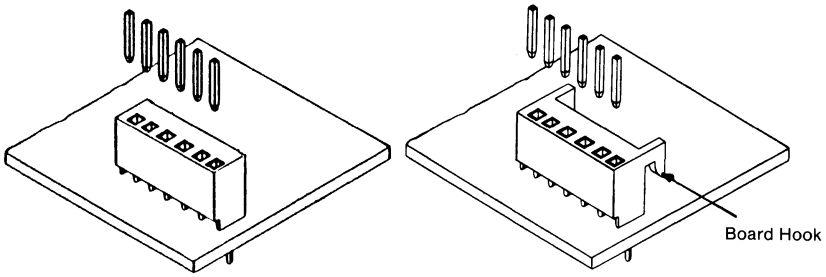
Plating Option	4455-BC	41765-B*
Tin Order No.	• 22-14-2XX4	22-15-6XX5
Gold Order No.	• 22-17-2XX2	—
Select Gold Order No.	• 22-17-3XX2	22-15-7XX5
Replace XX with number of circuits, 02-25 *41765 replace XX with 02-15		

• U.S. Standard Product available through Molex franchised distributors.

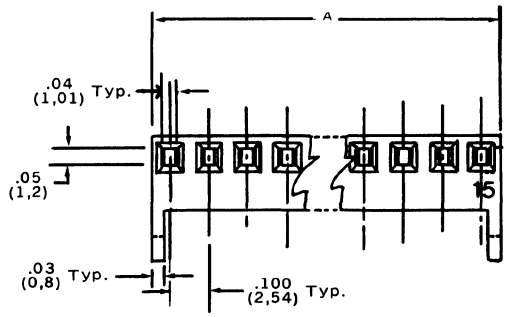
.100" (2,54 mm) Center P.C. Board Connectors

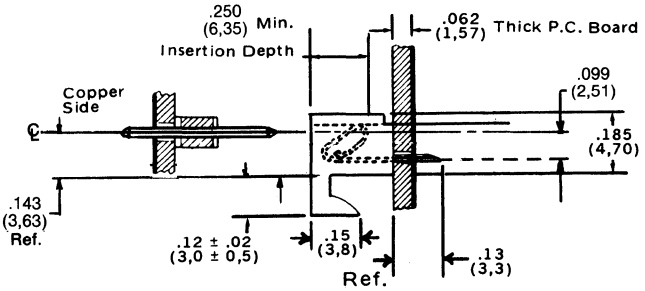
4455-CC Series
41765-C Series
Top Entry Type C

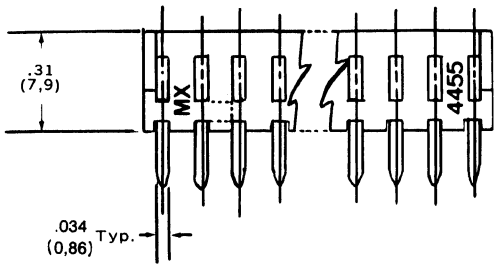
- 2-25 Circuits
- Top entry mount
- 4455 - 94V-0 nylon
  41765 - 94V-0 polyester
- Mates with Molex 4030, 4094, 4380, 42375, 42152, 70475 & 70021 headers and .025" square pins
- End-to-end stackable
- Also available without board hooks. See chart below



E

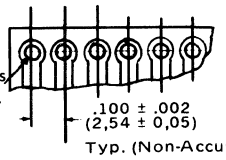






inches
mm

Recommended P.C. Board Layout



4161-1 Polarizing Key for 4455 AC and CC	
Order No.	15-04-9209

Dimensions 4455 Series

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.196 4,98	6	.596 15,14	10	.996 25,30	14	1.396 35,46	18	1.796 45,62	22	2.196 55,76
3	.296 7,52	7	.696 17,68	11	1.096 27,84	15	1.496 38,00	19	1.896 48,16	23	2.296 58,32
4	.396 10,06	8	.796 20,22	12	1.196 30,38	16	1.596 40,54	20	1.996 50,70	24	2.396 60,86
5	4.96 12,60	9	.896 22,76	13	1.296 32,92	17	1.696 43,08	21	2.096 53,24	25	2.496 63,40

Ordering Information (Preferred version in the Americas)

Plating Option	4455-CC (With Hooks)	4455-CC (Without Hooks)	41765-C (Without Hooks)
Tin Order No.	• 22-02-2**XX**5	22-02-7**XX**3	22-15-6**XX**4
Gold Order No.	• 22-18-2**XX**3	—	—
Select Gold Order No.	• 22-18-2**XX**1	—	22-15-7**XX**4
Replace **XX** with number of circuits, 02-25			

• U.S. Standard Product available through Molex franchised distributors.

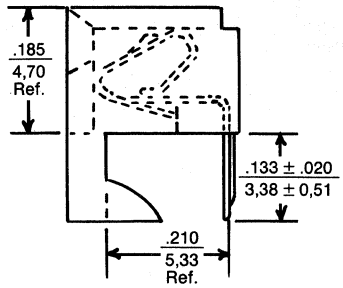
.100" (2,54 mm) Center P.C. Board Connectors with Cat Ear Terminals

4455C-NAAA
Right Angle

These assemblies are the same as 4455A, B & C versions on pages 28E & 29E except these have higher pressure cat ear contacts on the bronze terminals.

- □ Plating - hot tin/lead dip 60/40 1,0 μm (.000040") to 2,5 μm (.000100")
- □ 94V-0 White nylon

inches
mm

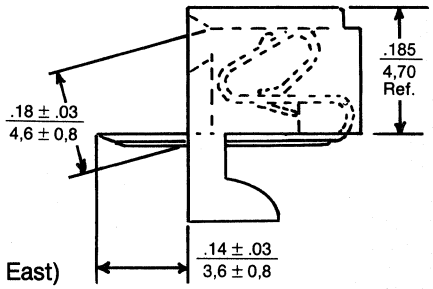


E

Ordering Information 4455C-NAAA (Preferred version in Europe and Far East)

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	38-00-1332	6	38-00-1336	10	38-00-1340	14	38-00-1344	18	38-00-1348	22	38-00-1352
3	38-00-1333	7	38-00-1337	11	38-00-1341	15	38-00-1345	19	38-00-1349	23	38-00-1353
4	38-00-1334	8	38-00-1338	12	38-00-1342	16	38-00-1346	20	38-00-1350	24	38-00-1354
5	38-00-1335	9	38-00-1339	13	38-00-1343	17	38-00-1347	21	38-00-1351	25	38-00-1355

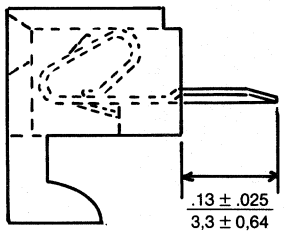
4455C-NBAA
Bottom Entry



Ordering Information 4455C-NBAA (Preferred version in Europe and Far East)

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	38-00-1392	6	38-00-1396	10	38-00-1400	14	38-00-1404	18	38-00-1408	22	38-00-1412
3	38-00-1393	7	38-00-1397	11	38-00-1401	15	38-00-1405	19	38-00-1409	23	38-00-1413
4	38-00-1394	8	38-00-1398	12	38-00-1402	16	38-00-1406	20	38-00-1410	24	38-00-1414
5	38-00-1395	9	38-00-1399	13	38-00-1403	17	38-00-1407	21	38-00-1411	25	38-00-1415

4455C-NCAA
Straight



Ordering Information 4455C-NCAA (Preferred version in Europe and Far East)

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	38-00-1422	6	38-00-1426	10	38-00-1430	14	38-00-1434	18	38-00-1438	22	38-00-1442
3	38-00-1423	7	38-00-1427	11	38-00-1431	15	38-00-1435	19	38-00-1439	23	38-00-1443
4	38-00-1424	8	38-00-1428	12	38-00-1432	16	38-00-1436	20	38-00-1440	24	38-00-1444
5	38-00-1425	9	38-00-1429	13	38-00-1433	17	38-00-1437	21	38-00-1441	25	38-00-1445

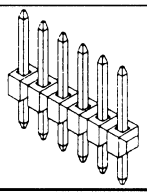
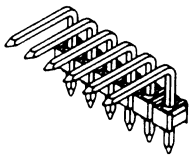
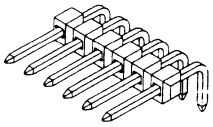
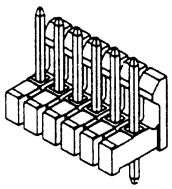
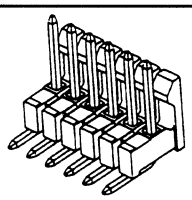
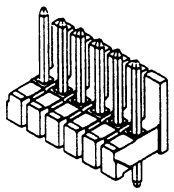
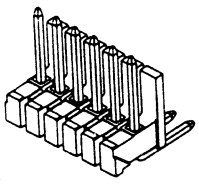
Dimensional Information 4455C-NAAA/4455C-NBAA/4455C-NCAA

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.196 4,98	7	.600 15,24	.696 17,68	12	1.100 27,94	1.196 30,38	17	1.600 40,64	1.696 43,08	22	2.100 53,34	2.196 55,78
3	.200 5,08	.296 7,52	8	.700 17,78	.796 20,21	13	1.200 30,48	1.296 32,92	18	1.700 43,18	1.796 45,62	23	2.200 55,88	2.296 58,32
4	.300 7,62	.396 10,06	9	.800 20,30	.896 22,76	14	1.300 33,02	1.396 33,46	19	1.800 45,72	1.896 48,16	24	2.300 58,42	2.396 60,86
5	.400 10,16	.496 12,60	10	.900 22,86	.996 25,30	15	1.400 35,56	1.496 38,00	20	1.900 48,26	1.996 50,70	25	2.400 60,96	2.496 63,40
6	.500 12,70	.596 15,14	11	1.000 25,40	1.096 27,84	16	1.500 38,10	1.596 40,54	21	2.000 50,80	2.096 53,24			

KK® .100" (2,54 mm) Centerline Headers

molex®

Product Cross Reference

		BREAKAWAY NYLON (94V-0)[5]	SOLID NYLON (94V-0)	
		2-36 ckts. (• 36 ckt. only)	**2-28 ckts.** (• 2-25 ckt. only)	
	**Flat**	**42375**	**4030**	**42152 (White)** *Recommended for circuit sizes greater than 10
	Tin	• 22-28-4XX2[3]	• 22-03-2XX1	22-66-2XX0
	Gold[4]	N/A	• 22-10-2XX1	22-66-3XX0
	Select Gold[6]	• 22-28-4XX5		22-10-7XX8
	**Flat**	**42376**	**4094**	**42153 (White)** *Recommended for circuit sizes greater than 10
	Tin	• 22-28-6XX0[3]	• 22-05-2XX1	22-67-2XX0
	Gold[4]	N/A	• 22-12-2XX1	22-67-3XX0
	Select Gold[6]	• 22-28-6XX2		22-12-3XX0
	**Flat**	**42377**	**N/A**	
	Tin	• 22-28-8XX0[3]	N/A	
	Gold[4]	N/A	N/A	
	Select Gold[6]	• 22-28-8XX2	N/A	
	**Friction Lock**	**42227[7]**	**6373**	
	Tin	• 22-28-0XX0[3]	• 22-23-2XX1	
	Gold[4]	N/A	• 22-11-2XX2	
	Select Gold[6]	• 22-28-0XX1	N/A	
	**Friction Lock**	**42228[7]**	**7478**	
	Tin	• 22-28-1XX0[3]	• 22-05-3XX1	
	Gold[4]	N/A	• 22-12-2XX4	
	Select Gold[6]	• 22-28-1XX1	N/A	
	**Polarizing Wall**	**42225[7]**	**N/A**	
	Tin	• 22-28-3XX0[3]	N/A	
	Gold[4]	N/A	N/A	
	Select Gold[6]	• 22-28-3XX1	N/A	
	**Polarizing Wall**	**42226[7]**	**N/A**	
	Tin	• 22-28-2XX0[3]	N/A	
	Gold[4]	N/A	N/A	
	Select Gold[6]	• 22-28-2XX2	N/A	

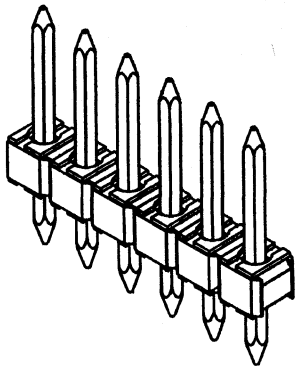
Notes: [1] **Replace XX with circuit sizes.**
[2] • U.S. Standard product, available through Molex franchised distributors
[3] Tin/Lead (90/10) over phosphor bronze
[4] 20 micro inch overall gold over nickel on brass
[5] Cutting tool available for Breakaway product — Order No. 11-20-1230
[6] 15 micro inch select gold over phosphor bronze — 30 microinch select gold available, contact factory.
[7] Available with kinks and/or backwalls removed.

Product Cross References are closest dimensional equivalent. See drawing for exact dimensions.

E

.100" (2,54mm) Center Breakaway Headers

42375
Straight Flat Header

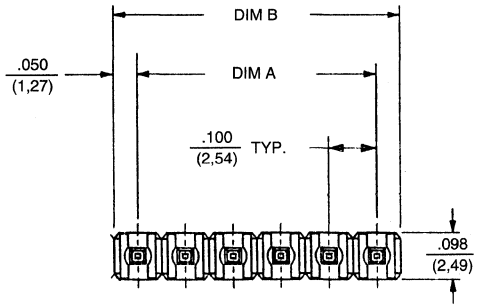


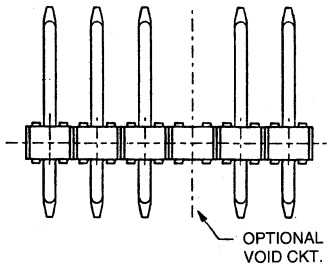
- 2-36 Circuits
- .025" (0,64mm) square phosphor bronze pins
- 94V-0 G. F. nylon insulator
- Mates with Molex .100" (2,54mm) centerline connectors

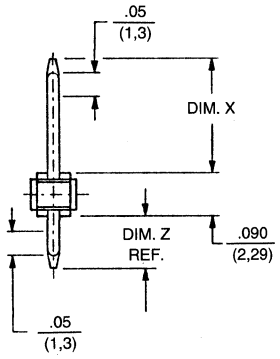
E

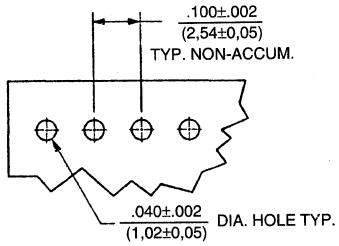
Mating Connectors

2695	7880	70430
4455	40556	90147
7690	41765	90148
7720	70066A	
7859	70400A	









PCB LAYOUT

Dimensions

Circuits	Dim. A*	Dim. B*
2	.100 (2,54)	.200 (5,08)
3	.200 (5,08)	.300 (7,62)

* For circuit size 4 through 36 add .100" (2,54mm) for each additional pin.

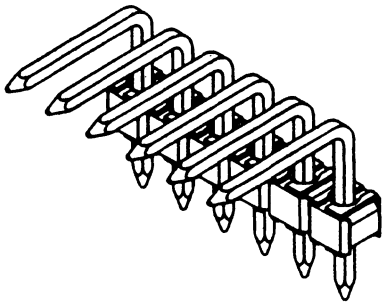
Ordering Information 42375 Note: Dim X = Mating End Dim Z = P.C. Tail

Plating Options	Dim X = .240" (6,09 mm) Dim Z = .125" (3,18 mm)	Dim X = .240" (6,09 mm) Dim Z = .135" (3,43 mm) Kinked P.C. Tail	Dim X = .295" (7,49 mm) Dim Z = .120" (3,05 mm)	Dim X = .295" (7,49 mm) Dim Z = .135" (3,43 mm) Kinked P.C. Tail	Dim X = .320" (8,13 mm) Dim Z = .120" (3,05 mm)	Dim X = .320" (8,13 mm) Dim Z = .135" (3,43 mm) Kinked P.C. Tail
Tin Order No.	• 22-28-4**XX**0	22-28-5**XX**0	• 22-28-4**XX**2	22-28-5**XX**2	• 22-28-4**XX**1	22-28-5**XX**1
15m Select Gold Order No.	• 22-28-4**XX**3	22-28-5**XX**3	• 22-28-4**XX**5	22-28-5**XX**5	• 22-28-4**XX**4	22-28-5**XX**4
30m Select Gold Order No.	• 22-28-4**XX**6	22-28-5**XX**6	• 22-28-4**XX**8	22-28-5**XX**8	• 22-28-4**XX**7	22-28-5**XX**7
Replace **XX** with number of circuits, 02-36						

• U.S. Standard Products available through Molex franchised distributors. (36 circuit only)

.100" (2,54mm) Center Breakaway Headers

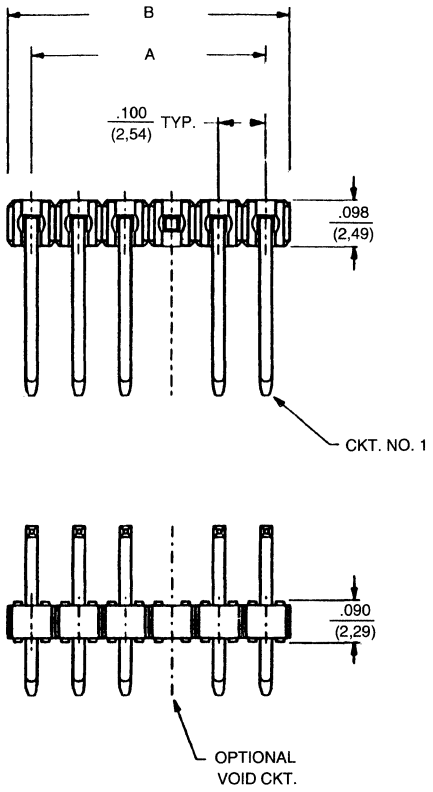
42376
Right Angle Flat Header

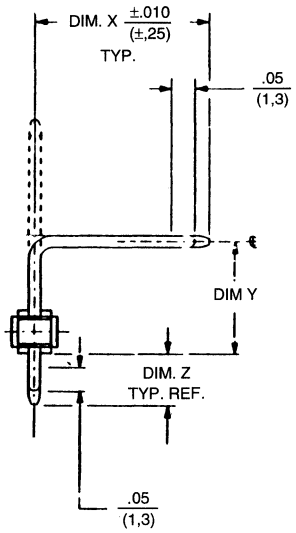


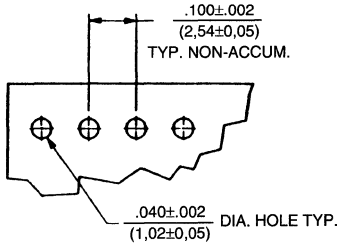
- 2-36 Circuits
- .025" (0,64mm) square phosphor bronze pins
- 94V-0 G. F. nylon insulator
- Mates with Molex .100" (2,54mm) centerline connectors

Mating Connectors

2695	7880	70430
4455	40556	90147
7690	41765	90148
7720	70066A	
7859	70400A	







PCB LAYOUT

Dimensions

Circuits	Dim. A*	Dim. B*
2	.100 (2,54)	.200 (5,08)
3	.200 (5,08)	.300 (7,62)

* For circuit size 4 through 36 add .100" (2,54mm) for each additional pin.

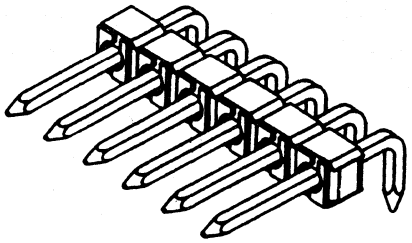
Ordering Information 42376 Note: Dim X = Mating End Dim Y = Mating Height Dim Z = P.C. Tail

Plating Options	Dim X = .361" (9,17 mm) Dim Y = .142" (3,61 mm) Dim Z = .120" (3,06 mm)	Dim X = .361" (9,17 mm) Dim Y = .142" (3,61 mm) Dim Z = .135" (3,43 mm) Kinked P.C. Tail	Dim X = .405" (10,29 mm) Dim Y = .248" (6,30 mm) Dim Z = .120" (3,06 mm)	Dim X = .405" (10,29 mm) Dim Y = .248" (6,30 mm) Dim Z = .135" (3,43 mm) Kinked P.C. Tail
Tin Order No.	• 22-28-6**XX**0	22-28-7**XX**0	• 22-28-6**XX**1	22-28-7**XX**1
15m Select Gold Order No.	• 22-28-6**XX**2	22-28-7**XX**2	• 22-28-6**XX**3	22-28-7**XX**3
30m Select Gold Order No.	• 22-28-6**XX**4	22-28-7**XX**4	• 22-28-6**XX**5	22-28-7**XX**5
Replace **XX** with number of circuits, 02-36				

• U.S. Standard Products available through Molex franchised distributors. (36 circuit only)

.100" (2,54mm) Center Breakaway Headers

42377
Right Angle Flat Header

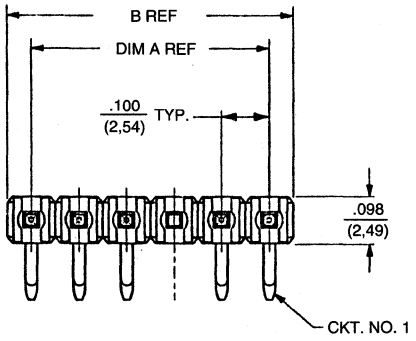


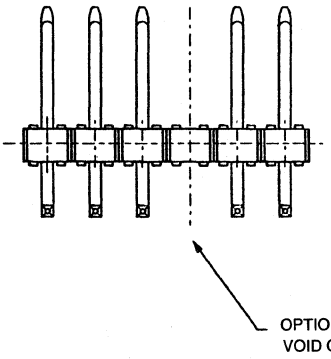
- 2-36 Circuits
- .025" (0,64mm) square phosphor bronze pins
- 94V-0 G. F. nylon insulator
- Mates with Molex .100" (2,54mm) centerline connectors

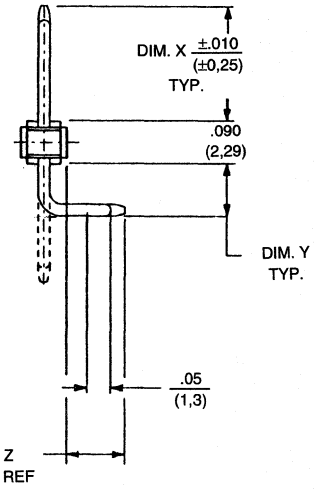
E

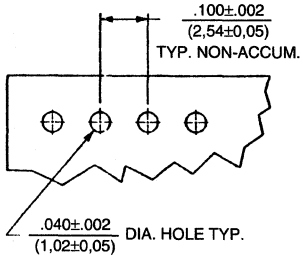
Mating Connectors

2695	7880	70430
4455	40556	90147
7690	41765	90148
7720	70066A	
7859	70400A	









PCB LAYOUT

Dimensions

Circuits	Dim. A*	Dim. B*
2	.100 (2,54)	.200 (5,08)
3	.200 (5,08)	.300 (7,62)

* For circuit size 4 through 36 add .100" (2,54mm) for each additional pin.

Ordering Information 42377 Note: Dim X = Mating End Dim Z = P.C. Tail

Plating Options	Dim X = .244" (6,20 mm) Dim Z = .120" (3,05 mm)	Dim X = .244" (6,20 mm) Dim Z = .135" (3,43 mm) Kinked P.C. Tail	Dim X = .324" (8,23 mm) Dim Z = .120" (3,05 mm)	Dim X = .324" (8,23 mm) Dim Z = .135" (3,43 mm) Kinked P.C. Tail
Tin Order No.	• 22-28-8**XX**0	22-28-9**XX**0	• 22-28-8**XX**1	22-28-9**XX**1
15m Select Gold Order No.	• 22-28-8**XX**2	22-28-9**XX**2	• 22-28-8**XX**3	22-28-9**XX**3
30m Select Gold Order No.	• 22-28-8**XX**4	22-28-9**XX**4	• 22-28-8**XX**5	22-28-9**XX**5
Replace **XX** with number of circuits, 02-36				

• U.S. Standard Products available through Molex franchised distributors. (36 circuit only)

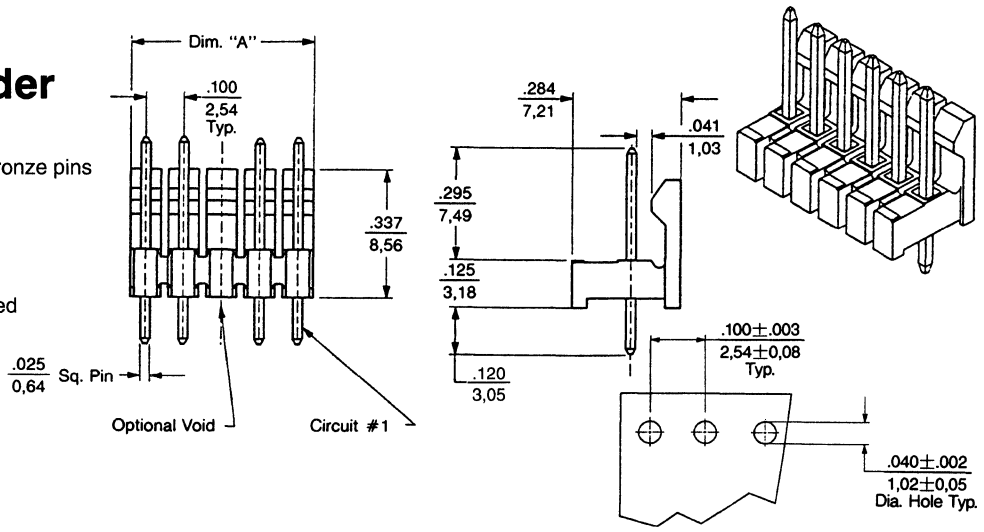
.100" (2,54 mm) Center Breakaway Headers

42227
Friction Lock Header

- ☐ 2-36 Circuits
- ☐ .025" (0,64 mm) square phosphor bronze pins
- ☐ 94V-0 glass filled nylon
- ☐ Mates with Molex .100" (2,54 mm) centerline connectors
- ☐ Available with kinked pins
- ☐ Available with end backwalls removed for left to right polarization

Mating connectors

2695	7880
6471	4455
7720	41765



Recommended P.C. Board Hole Layout

Ordering Information 42227

Standard
Tin Order No. • 22-28-0**XX**0
15m Select Gold Order No. • 22-28-0**XX**1
30m Select Gold Order No. • 22-28-0**XX**2
Replace "**XX**" with number of circuits, 02-36

With kinked tails
Tin Order No. 22-28-0**XX**3
15m Select Gold Order No. 22-28-0**XX**4
30m Select Gold Order No. 22-28-0**XX**5
Replace "**XX**" with number of circuits, 02-36

With backwalls removed
Tin Order No. 22-28-0**XX**6
15m Select Gold Order No. 22-28-0**XX**7
30m Select Gold Order No. 22-28-0**XX**8
Replace "**XX**" with number of circuits, 03-36

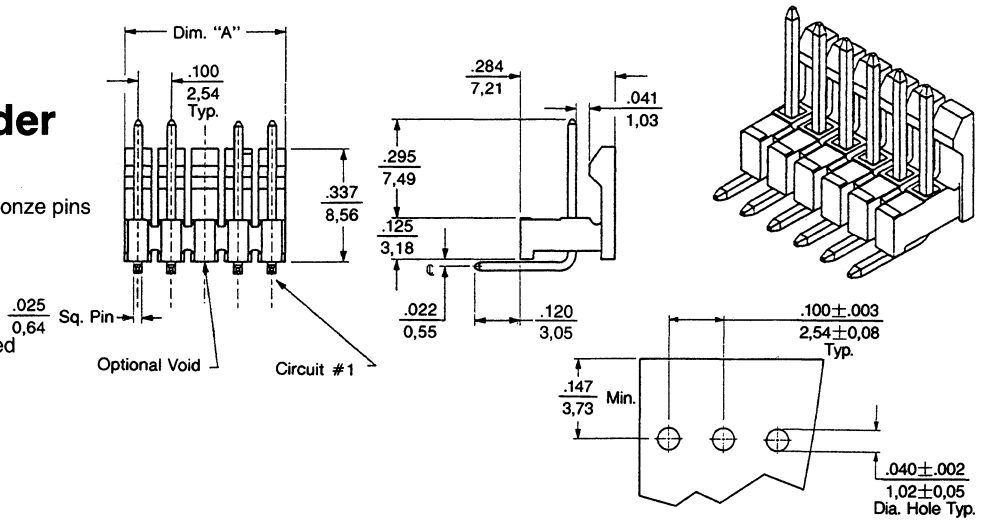
• U.S. Standard Product, available through Molex franchised distributors. (36 circuit only)

42228
Right Angle Friction Lock Header

- ☐ 2-36 Circuits
- ☐ .025" (0,64 mm) square phosphor bronze pins
- ☐ 94V-0 glass filled nylon
- ☐ Mates with Molex .100" (2,54 mm) centerline connectors
- ☐ Available with kinked pins
- ☐ Available with end backwalls removed for left to right polarization

Mating connectors

2695	7880
6471	4455
7720	41765



Recommended P.C. Board Hole Layout

Ordering Information 42228

Standard
Tin Order No. • 22-28-1**XX**0
15m Select Gold Order No. • 22-28-1**XX**1
30m Select Gold Order No. • 22-28-1**XX**2
Replace "**XX**" with number of circuits, 02-36

With kinked tails
Tin Order No. 22-28-1**XX**3
15m Select Gold Order No. 22-28-1**XX**4
30m Select Gold Order No. 22-28-1**XX**5
Replace "**XX**" with number of circuits, 02-36

With backwalls removed
Tin Order No. 22-28-1**XX**6
15m Select Gold Order No. 22-28-1**XX**7
30m Select Gold Order No. 22-28-1**XX**8
Replace "**XX**" with number of circuits, 03-36

• U.S. Standard Product, available through Molex franchised distributors. (36 circuit only)

Dimensions 42227/42228

Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A
2	.20 5,08	6	.60 15,24	10	1.00 25,40	14	1.40 35,56	18	1.80 45,72	22	2.20 55,88	26	2.60 66,04	30	3.00 76,20	34	3.40 86,36
3	.30 7,62	7	.70 17,78	11	1.10 27,94	15	1.50 38,10	19	1.90 48,26	23	2.30 58,42	27	2.70 68,58	31	3.10 78,74	35	3.50 88,90
4	.40 10,16	8	.80 20,32	12	1.20 30,48	16	1.60 40,64	20	2.00 50,80	24	2.40 60,96	28	2.80 71,12	32	3.20 81,28	36	3.60 91,44
5	.50 12,70	9	.90 22,86	13	1.30 33,02	17	1.70 43,18	21	2.10 53,34	25	2.50 63,50	29	2.90 73,66	33	3.30 83,82		

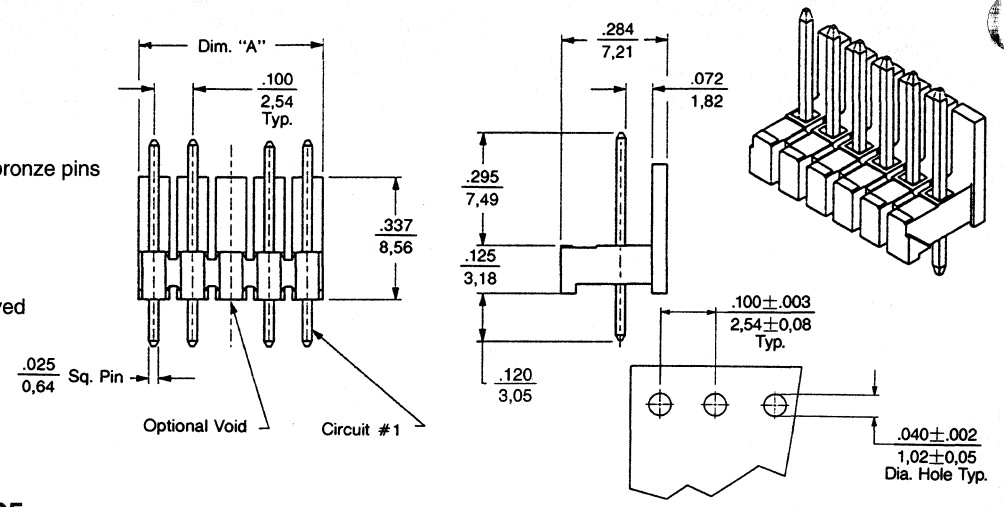
.100" (2,54 mm) Center Breakaway Headers

42225
Polarizing Header

- 2-36 Circuits
- .025" (0,64 mm) square phosphor bronze pins
- 94V-0 glass filled nylon
- Mates with Molex .100" (2,54 mm) centerline connectors
- Available with kinked pins
- Available with end backwalls removed for left to right polarization

Mating connectors

2695	7880
6471	4455
7720	41765



Ordering Information 42225

Standard
Tin Order No. • 22-28-3**XX**0
15m Select Gold Order No. • 22-28-3**XX**1
30m Select Gold Order No. • 22-28-3**XX**2
Replace "**XX**" with number of circuits, 02-36

With kinked tails
Tin Order No. 22-28-3**XX**3
15m Select Gold Order No. 22-28-3**XX**4
30m Select Gold Order No. 22-28-3**XX**5
Replace "**XX**" with number of circuits, 02-36

With backwalls removed
Tin Order No. 22-28-3**XX**6
15m Select Gold Order No. 22-28-3**XX**7
30m Select Gold Order No. 22-28-3**XX**8
Replace "**XX**" with number of circuits, 03-36

Recommended P.C. Board Hole Layout

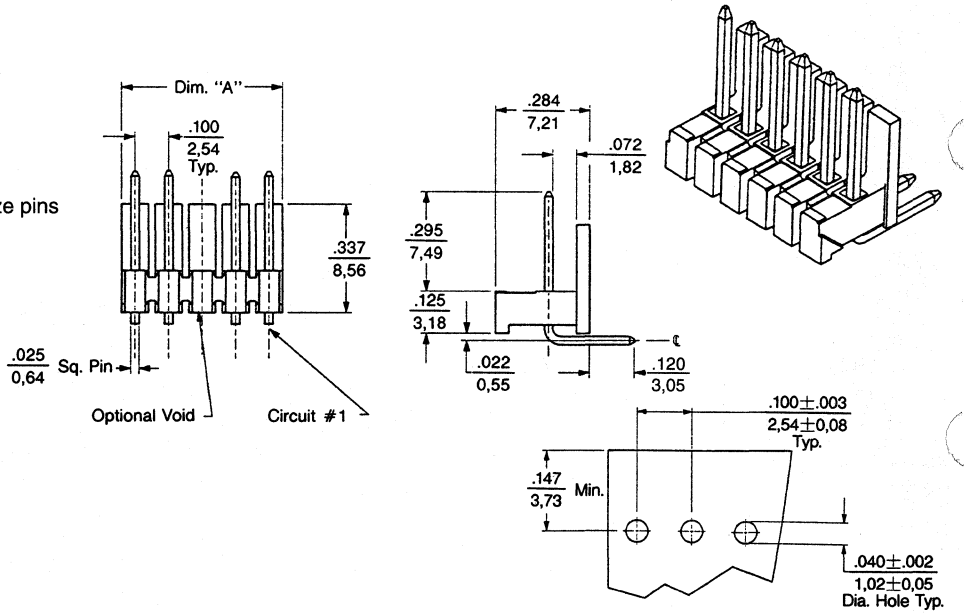
• U.S. Standard Product, available through Molex franchised distributors. (36 circuit only)

42226
Right Angle Polarizing Header

- 2-36 Circuits
- .025" (0,64 mm) square phosphor bronze pins
- 94V-0 glass filled nylon
- Mates with Molex .100" (2,54 mm) centerline connectors
- Available with kinked pins
- Available with end backwalls removed for left to right polarization

Mating connectors

2695	7880
6471	4455
7720	41765



Ordering Information 42226

Standard
Tin Order No. • 22-28-2**XX**0
15m Select Gold Order No. • 22-28-2**XX**2
30m Select Gold Order No. • 22-28-2**XX**3
Replace "**XX**" with number of circuits, 02-36

With kinked tails
Tin Order No. 22-28-2**XX**4
15m Select Gold Order No. 22-28-2**XX**5
30m Select Gold Order No. 22-28-2**XX**6
Replace "**XX**" with number of circuits, 02-36

With backwalls removed
Tin Order No. 22-28-2**XX**7
15m Select Gold Order No. 22-28-2**XX**8
30m Select Gold Order No. 22-28-2**XX**9
Replace "**XX**" with number of circuits, 03-36

Recommended P.C. Board Hole Layout

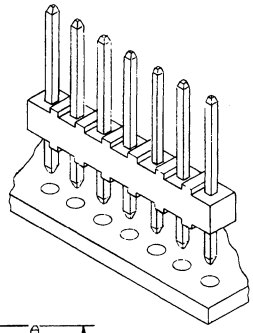
• U.S. Standard Product, available through Molex franchised distributors. (36 circuit only)

Dimensions 42225/42226

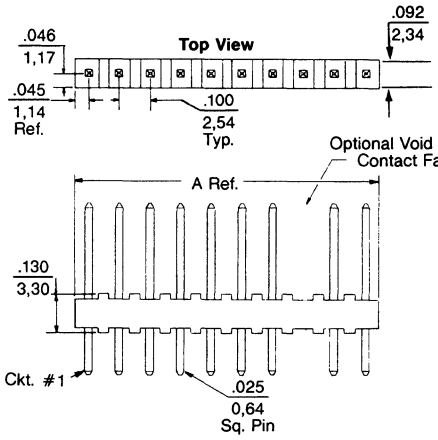
Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A
2	.20 5,08	6	.60 15,24	10	1.00 25,40	14	1.40 35,56	18	1.80 45,72	22	2.20 55,88	26	2.60 66,04	30	3.00 76,20	34	3.40 86,36
3	.30 7,62	7	.70 17,78	11	1.10 27,94	15	1.50 38,10	19	1.90 48,26	23	2.30 58,42	27	2.70 68,58	31	3.10 78,74	35	3.50 88,90
4	.40 10,16	8	.80 20,32	12	1.20 30,48	16	1.60 40,64	20	2.00 50,80	24	2.40 60,96	28	2.80 71,12	32	3.20 81,28	36	3.60 91,44
5	.50 12,70	9	.90 22,86	13	1.30 33,02	17	1.70 43,18	21	2.10 53,34	25	2.50 63,50	29	2.90 73,66	33	3.30 83,82		

.100" (2,54 mm) Center Headers

4030/42152 Series
Straight Square Pin Flat Header

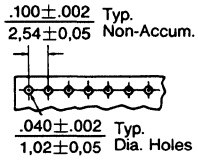


- 2-28 circuits
- .025" (0,64 mm) square brass pins
- 4030 has 94V-0 nylon housing
- Mates with Molex .100" (2,54 mm) centerline connectors
- 42152 has 94V-0 glass-filled nylon housing, white
- 42152 recommended for circuit sizes greater than 10



Mating connectors

2695	4455AC, CC
6471	4455C-NAAA
7880	4455C-NCAA
7720	



Recommended P.C. Board Layout for .100" (2,54 mm) Headers

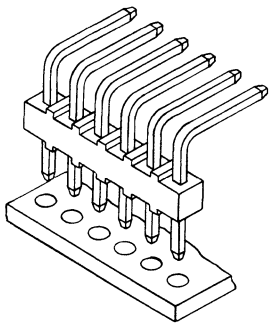
Ordering Information 4030/42152

4030	42152
Tin Order No. • 22-03-2**XX**1	**Tin Order No.** 22-66-2**XX**0
Gold Order No. • 22-10-2**XX**1	**Gold Order No.** 22-66-3**XX**0
	Select Gold Order No. 22-10-7**XX**8
Replace "**XX**" with number of circuits, 02-28	

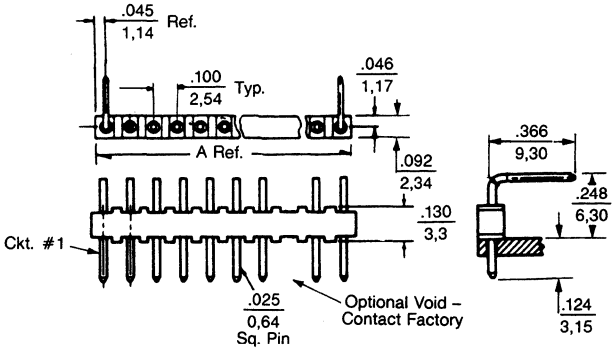
• U.S. Standard Product, available through Molex franchised distributors.
(2-25 Circuit Only)

In the Far East the polyester product has different Eng. Nos. and Order Nos. Contact factory for sales drawings on 70309-XXXX.

4094/42153 Series
Right Angle Square Pin Flat Header

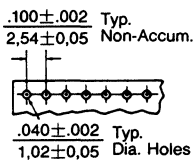


- 2-28 circuits
- .025" (0,64 mm) right angle square brass pins
- 4094 has 94V-0 nylon housing
- Mates with Molex .100" (2,54 mm) center connectors
- 42153 has 94V-0 glass-filled nylon housing, white
- 42153 recommended for circuit sizes greater than 10



Mating connectors

2695	4455AC, CC
6471	4455C-NAAA
7880	4455C-NCAA
7720	



Recommended P.C. Board Layout for .100" (2,54 mm) Headers

Ordering Information 4094/42153

4094	42153
Tin Order No. • 22-05-2**XX**1	**Tin Order No.** 22-67-2**XX**0
Gold Order No. • 22-12-2**XX**1	**Gold Order No.** 22-67-3**XX**0
	Select Gold Order No. 22-12-3**XX**0
Replace "**XX**" with number of circuits, 02-28	

• U.S. Standard Product, available through Molex franchised distributors.
(2-25 Circuit Only)

Dimensions 4030/4094

In the Far East the polyester product has different Eng. Nos. and Order Nos. Contact factory for sales drawings on 70319-XXXX.

Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A
2	.19 4,8	5	.49 12,5	8	.79 20,1	11	1.09 27,7	14	1.39 35,3	17	1.69 42,9	20	1.99 50,6	23	2.29 58,2	25	2.49 63,2
3	.29 7,4	6	.59 15,0	9	.89 22,6	12	1.19 30,2	15	1.49 37,9	18	1.79 45,5	21	2.09 53,1	24	2.39 60,1	28	2.79 70,9
4	.39 9,9	7	.69 17,5	10	.99 25,1	13	1.29 32,8	16	1.59 40,4	19	1.89 48,0	22	2.19 55,6				

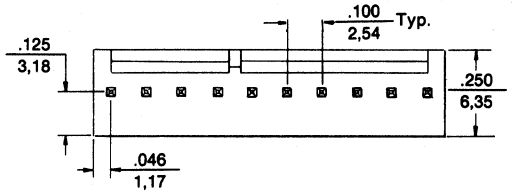
.100" (2,54 mm) Center Headers

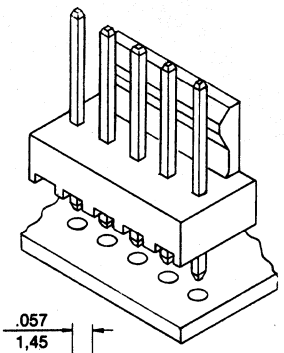
E

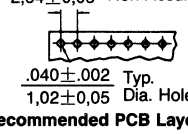
6373 Series
Straight Square Pin Friction Lock Header

- 2-28 circuits
- .025" (0,64 mm) square brass pins
- 94V-0 nylon housing
- Mates with KK .100" (2,54mm) centerline connectors

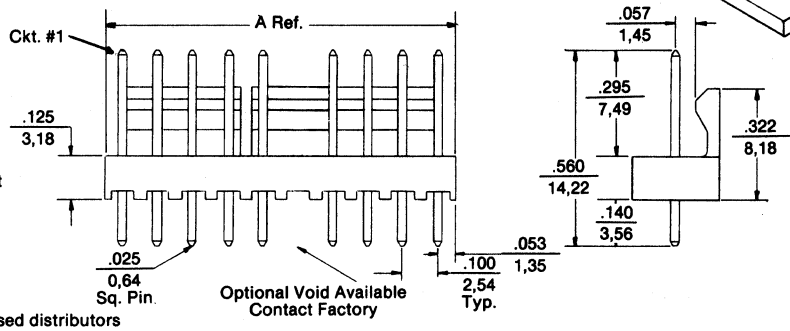
Mating connectors
2695
6471
7880
70400-H
4455-AC & 4455CC







Recommended PCB Layout



Ordering Information 6373

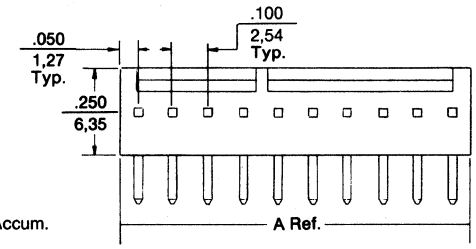
Tin Order No. • 22-23-2XX1
Gold Order No. • 22-11-2XX2
Replace **XX** with number of circuits, 02-28

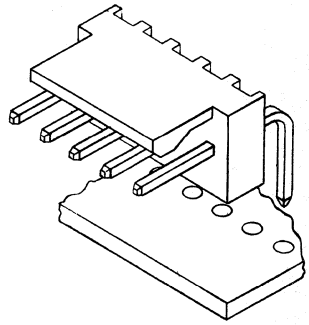
• U.S. Standard Product, available through Molex franchised distributors
(2-25 circuits only)

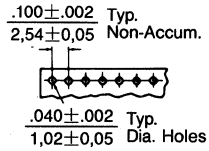
7478 Series
Right Angle Square Pin Friction Lock Header

- 2-28 circuits
- .025" (0,64mm) right angle square brass pins
- 94V-0 nylon housing

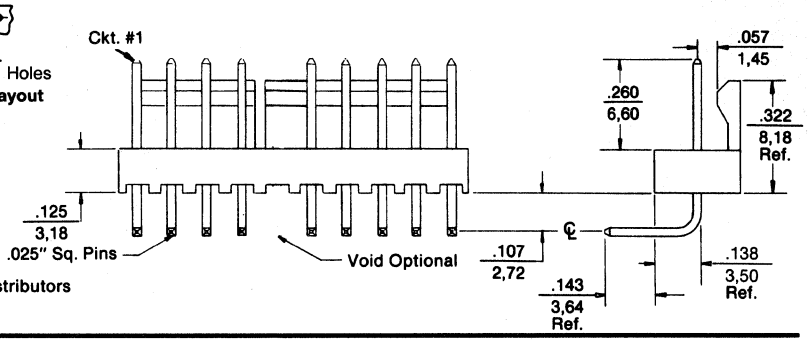
Mating connectors
2695
6471
7880
70400-H
4455AC & 4455CC







Recommended PCB Layout



Ordering Information 7478
(Preferred version in the Americas)

Tin Order No. • 22-05-3XX1
Gold Order No. • 22-12-2XX4
Replace **XX** with number of circuits, 02-28

• U.S. Standard Product, available through Molex franchised distributors
(2-25 circuits only)

Dimensions 6373/7478

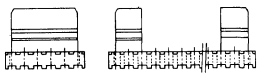
Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.200 5,08	7	.700 17,78	12	1.200 30,48	17	1.700 43,18	21	2.100 53,34	25	2.500 63,50
3	.300 7,62	8	.800 20,32	13	1.300 33,02	18	1.800 45,72	22	2.200 55,88	26	2.600 66,04
4	.400 10,16	9	.900 22,86	14	1.400 35,56	19	1.900 48,26	23	2.300 58,42	27	2.700 68,58
5	.500 12,70	10	1.000 25,40	15	1.500 38,10	20	2.000 50,80	24	2.400 60,96	28	2.800 71,12
6	.600 15,24	11	1.100 27,94	16	1.600 40,64						

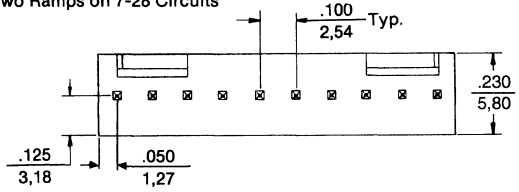
.100" (2,54 mm) Center Headers

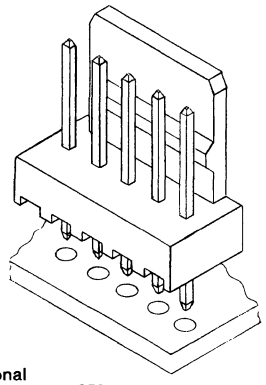
6410 Series
Straight Square Pin Friction Lock Header

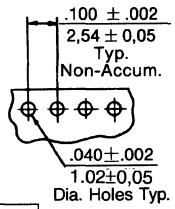
- 2-28 circuits
- .025" (0,64 mm) square brass pins
- 94V-0 nylon housing
- Mates with KK .100" (2,54 mm) centerline connectors

Mating connectors
2695 with locking ramp
6471
7880

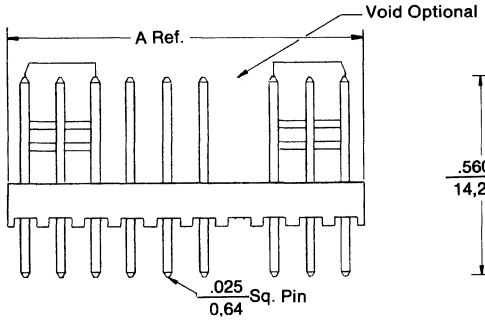


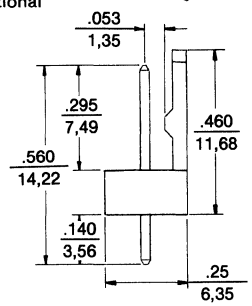






Recommended P.C. Board Layout





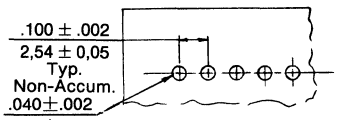
Ordering Information 6410

Tin Order No. • 22-27-2**XX**1
Gold Order No. • 22-29-2**XX**1
Replace **XX** with number of circuits, 02-28

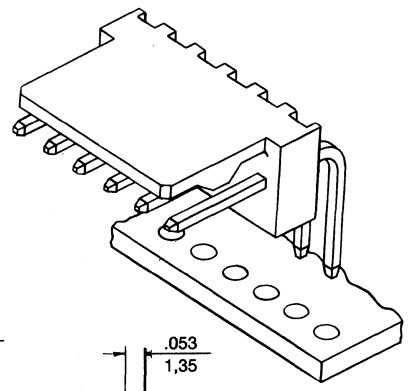
• U.S. Standard Product, available through Molex franchised distributors **(2-25 circuits only)**

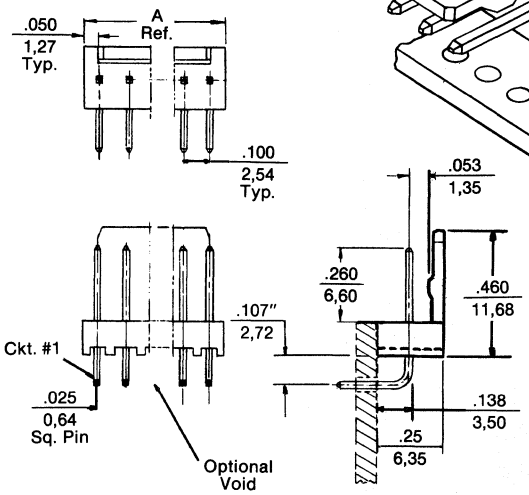
7395 Series
Right Angle Friction Lock

- 2-28 circuits
- .025" (0,64mm) right angle square brass pins
- 94V-0 nylon housing
- Pins .0002" (0,005mm) min. electro tin over .0001" (0,003mm) min. copper
- Mates with Molex 6471, 7720S, and 2695
- **Edgemount only**



Recommended P.C. Board Layout





Ordering Information 7395
(Preferred version in Europe and the Far East)

Order No. 22-05-7**XX**8
Replace **XX** with number of circuits, 02-28

Dimensions 6410/7395

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.200 5,08	7	.700 17,78	12	1.200 30,48	17	1.700 43,18	21	2.100 53,34	25	2.500 63,50
3	.300 7,62	8	.800 20,32	13	1.300 33,02	18	1.800 45,72	22	2.200 55,88	26	2.600 66.04
4	.400 10,16	9	.900 22,86	14	1.400 35,56	19	1.900 48,26	23	2.300 58,42	27	2.700 68,58
5	.500 12,70	10	1.000 25,40	15	1.500 38,10	20	2.000 50,80	24	2.400 60,96	28	2.800 71,12
6	.600 15,24	11	1.100 27,94	16	1.600 40,64						

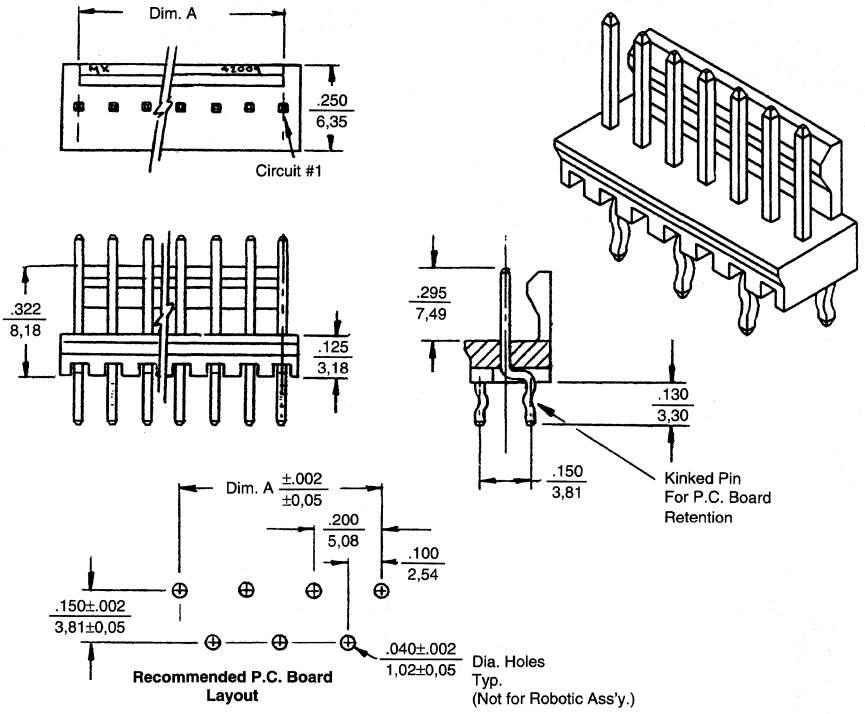
.100" (2,54mm) Center Headers

42009
Straight Square Pin Staggered Tail Header

- 2-10 Circuits
- .025" (0,64mm) square brass pins
- 94V-0 polyester material
- Mates with Molex .100" (2,54mm) centerline connectors
- Kinked pins
- Staggered tails

Mating Connectors

2695	7880
6471	4455
7720	41765



Ordering Information 42009

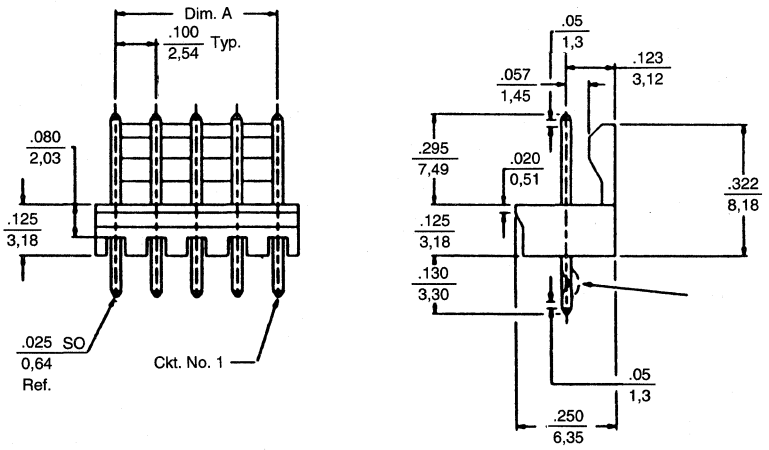
Tin Order No. 22-23-3XX4
Replace "XX" with number of circuits, 2-10

43009
Straight Square Pin Kinked Tail Header

- 2-10 Circuits
- .025" (0,64mm) square brass pins
- 94V-0 polyester
- Kinked solder tails for retention to P.C.B.
- Friction lock backwall also polarizes mating connector

Mating Connectors

2695	7880
6471	4455
7720	41765
40555	



Ordering Information 43009

Tin Order No. 22-23-5XX1
Replace "XX" with number of circuits, 2-10

Dimensions 42009/43009

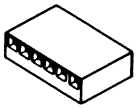
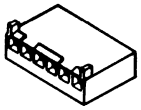
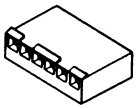
Ckt.	Dim. A	Ckt.	Dim. A	Ckt.	Dim. A	Ckt.	Dim. A	Ckt.	Dim. A	Ckt.	Dim. A	Ckt.	Dim. A	Ckt.	Dim. A	Ckt.	Dim. A
2	.195 4,95	3	.295 7,49	4	.395 10,03	5	.495 12,57	6	.595 15,11	7	.695 17,65	8	.795 20,19	9	.895 22,73	10	.995 25,27

.156" (3,96 mm) Center Connector System

Crimp Terminals

Eng No.	Plating	Order No. (Loose)	Order No. (Chain)
STANDARD CANTILEVER TERMINAL			
2478 (18-24 AWG Wire)	Tin	•08-52-0072	•08-52-0071
	Gold	•08-58-0122	•08-58-0121
	Select Gold	•08-65-0115	•08-65-0114
2578 (22-26 AWG Wire)	Tin	•08-50-0134	•08-50-0133
	Gold	•08-58-0126	•08-58-0125
	Select Gold	•08-65-0117	•08-65-0116
TRIFURCON TERMINAL (3 POINTS OF CONTACT)			
6838 (18-24 AWG Wire)	Tin	•08-52-0113	•08-52-0112
	Gold	•08-58-0189	•08-58-0187
	Select Gold	•08-58-0111	•08-58-0110
7258 (22-26 AWG Wire)	Tin	•08-52-0125	•08-52-0124
	Gold	•08-56-0124	•08-56-0123
	Select Gold	•08-65-0122	•08-65-0121

.156" Centerline Crimp Housings

Options	Order No. (circuits 2-18)
 Without Polarizing Ribs or Locking Ramp	• 09-50-8**XX**0**
 With Polarizing Ribs and Locking Ramp Offers left-to-right polarization when mated to solid polyester locking header only.	• 09-50-8**XX**3**
 With Locking Ramp Only	• 09-50-8**XX**1**

Polarizing Key for Crimp and PC Connector: Order No. **15-04-0297

Crimp Tooling

Hand Tools

Wire Gauge (18-26 AWG Wire)	Order No.
	• 11-01-0026

Mini-Mac Die*

Wire Gauge	Order No.
(18-22 AWG Wire)	11-18-2021
(22-26 AWG Wire)	11-18-2022

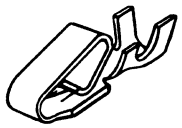
TM40 Die*

Wire Gauge	Order No.
(18-22 AWG Wire)	11-40-2096
(22-26 AWG Wire)	11-40-2097

TM40 Press & Die

Wire Gauge	Order No.
(18-22 AWG Wire)	11-04-0418
(22-26 AWG Wire)	11-04-0420

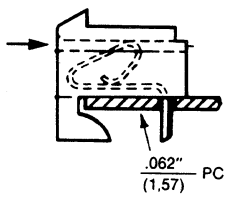
*Die only. Does not include press & spare tooling.


Standard


Trifurcon

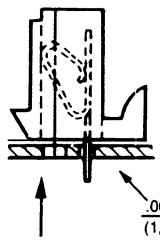
Terminal Extraction Tool: Order No. **11-03-0016**

.156" Centerline Printed Circuit Board Connectors



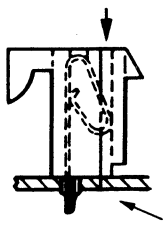
Right Angle Pin Entry

Plating	Order No.** (circuits 2-15)
Tin	• 09-48-2**XX**1
Select Gold	• 09-48-3**XX**5



Bottom Pin Entry

Plating	Order No. (circuits 2-15)
Tin	• 09-48-2**XX**2
Select Gold	• 09-48-3**XX**4



Top Pin Entry

Plating	Order No.** (circuits 2-15)
Tin	• 09-48-2**XX**3
Select Gold	• 09-48-3**XX**6

• U.S. Standard Product, available through Molex franchised distributors.

Replace "**XX**" with circuit size.

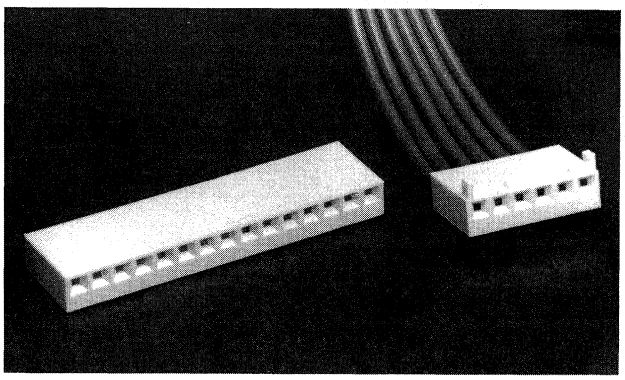
.156" (3,96 mm) Center Crimp Terminal Housing

41695 Series

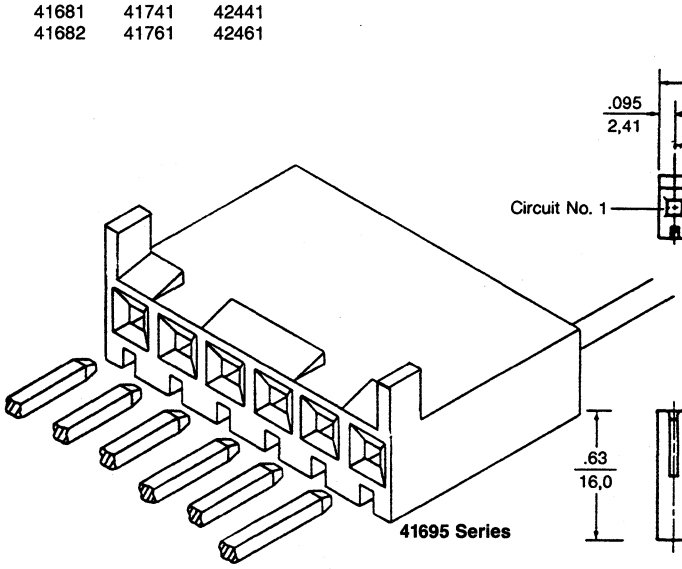
- 2-18 circuits
- Locking and polarizing features available
- **94V-0 polyester material**
- Accepts Molex double cantilever crimp terminals 2478, 2578, as well as Molex crimp Trifurcon™ terminals 6438, 6838, 7258. (Order separately)

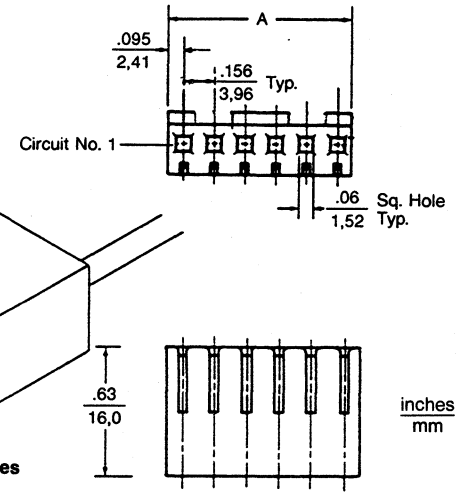
Mating headers for 41695

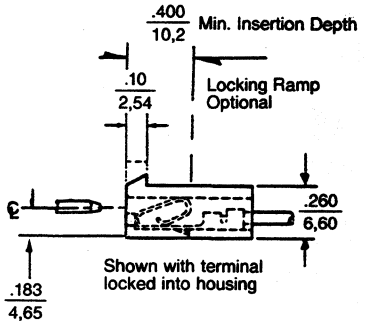
41661	A4042	41771	42471
41662	41701	41772	42472
41671	41711	41791	42491
41672	41721	41792	42492
41681	41741	42441	
41682	41761	42461	

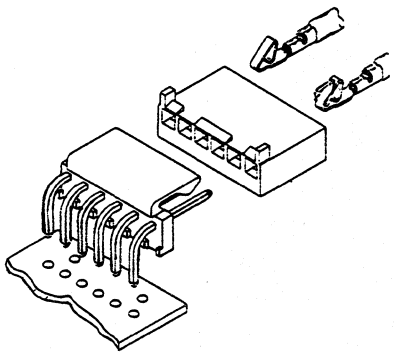


Without rib or ramp. With rib and ramp.









NOTE: 2 circuit parts have full ramp.

42324-A POLARIZING KEY	
Order No.	• 15-04-0297

Dimensions

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.34 8,7	6	.97 24,5	10	1.60 40,4	13	2.06 52,3	16	2.53 64,2
3	.50 12,7	7	1.12 28,5	11	1.75 44,4	14	2.21 56,2	17	2.68 68,1
4	.65 16,6	8	1.28 32,5	12	1.90 48,3	15	2.37 60,2	18	2.84 72,1
5	.81 20,8	9	1.43 36,4						

Ordering Information (Preferred version in the Americas)

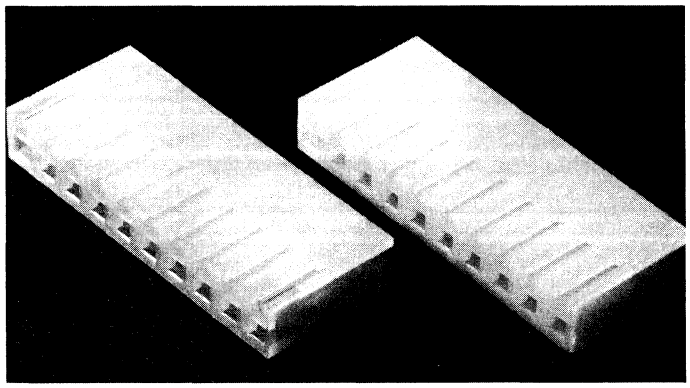
With Locking Ramp and Polarizing Ribs Order No. • 09-50-8**XX**3
Without Locking Ramp or Polarizing Ribs Order No. • 09-50-8**XX**0
With Locking Ramp Only Order No. • 09-50-8**XX**1
Replace "**XX**" with number of circuits, 02-18

• U.S. Standard Product, available through Molex franchised distributors.

.156" (3,96 mm) Center Crimp Terminal Housing

2139 Series

- 2-18 Circuits
- Locking ramp available
- Accepts Molex double cantilever crimp terminals
- 94V-2 nylon; **See 41695, page 42E for 94V-0 housing**
- Housing available with integrally molded polarizing keys and ribs
- Mates with Molex KK .156" (3,96mm) center headers or .045" (1,14mm) staked pins (See list)



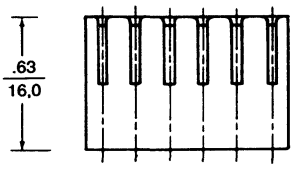
Mating headers for 2139/3069

41661	A4042	41761	42441
41662	41701	41771	42461
41671	41711	41772	42471
41672	41721	41791	42491
41681	41741	41792	42492
41682			

Ordering Information 2139
(Preferred version in the Americas)

Without Locking Ramp Order No. • 09-50-7**XX**1
With Locking Ramp Order No. • 09-50-3**XX**1
Replace "**XX**" with number of circuits, 02-18

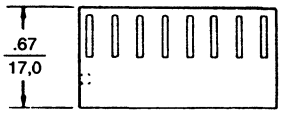
• U.S. Standard Product, available through Molex franchised distributors.



2139 Series

3069 Series

- Standard version without polarizing rib
- With or without locking ramp
- 2-20 circuits
- Accepts Molex double cantilever crimp terminals
- 94V-2 nylon
- Housing available with integrally molded polarizing rib on position 1. Contact factory to order
- Mates with Molex KK .156" (3,96mm) center headers or .045" (1,14mm) staked pins



3069 Series

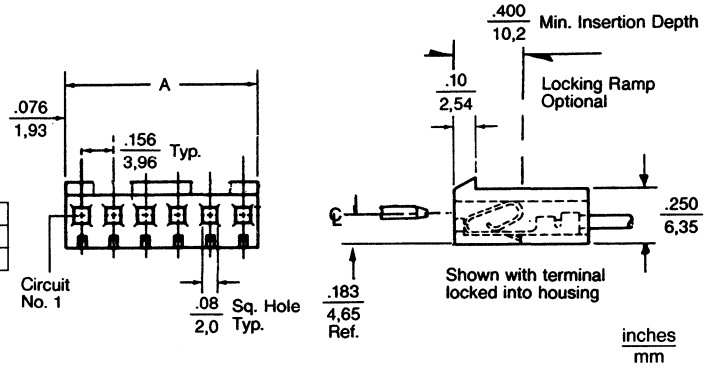
Mating headers for 3069 only

3192	2220
3246	3243
3190	

Ordering Information 3069
(Preferred version in the Europe and the Far East)

Without Locking Ramp Order No. 09-92-XX00
With Locking Ramp Order No. 09-91-XX00
Replace "**XX**" with number of circuits, 02-20

	Eng. No.	Order No.
Polarizing Key	2560-1	• 15-04-0219
Polarizing Peg	2560-2	• 15-04-0220



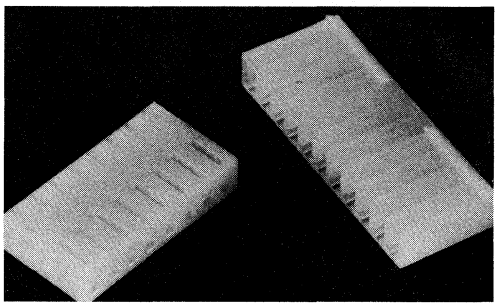
Dimensions 2139/3069

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.31 ± .007 7,92 ± 0,18	6	.93 ± .010 23,67 ± 0,25	10	1.56 ± .012 39,52 ± 0,30	14	2.18 ± .014 55,37 ± 0.36	18	2.804 ± .009 71,22 ± 0,23
3	.46 ± .010 11,79 ± 0,25	7	1.09 ± .012 27,64 ± 0,30	11	1.71 ± .012 43,48 ± 0,30	15	2.34 ± .014 59,33 ± 0,36	19	2.960 ± .014 65,18 ± 0,36
4	.62 ± .010 15,75 ± 0,25	8	1.24 ± .012 31,60 ± 0,30	12	1.87 ± .012 47,45 ± 0,30	16	2.492 ± .007 63,30 ± 0,18	20	3.116 ± .018 79,15 ± 0,46
5	.78 ± .010 19,71 ± 0.25	9	1.40 ± .012 35,56 ± 0,38	13	2.02 ± .014 51,41 ± 0,36	17	2.648 ± .008 67,26 ± 0,20		

Highlighted area denotes 3069 Series only.

.156" (3,96) Center Crimp Terminal Housing

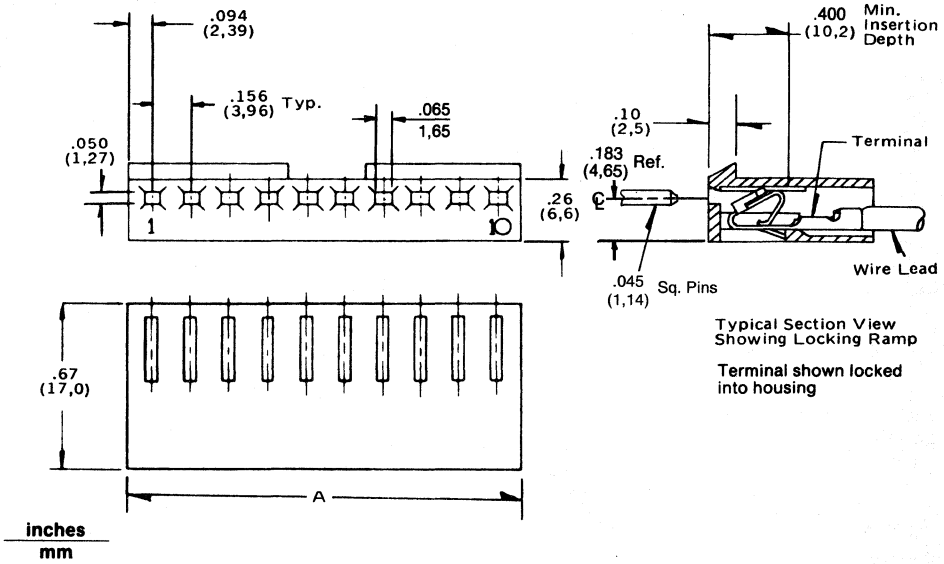
6442
Housing for Trifurcon Terminals



- 2-24 circuits
- Accepts crimp types 6438, 6838 and 7258 Trifurcon terminals
- Mates with .156" (3,96mm) center headers or .045" (1,14mm) square pins
- Available with voided circuits in various locations–Contact factory
- Optional continuous locking ramp on housings for up to 8 circuits. For housings with more than 8 circuits, ramp spans four circuits on each end
- 94V-2 nylon; **See 41695, page 42E for 94V-0 housing**

Mating headers for 6442

3192	41661	41711	41792
3279	41662	41721	42441
3246	41671	41741	42461
3190	41672	41761	42471
3243	41681	41771	42472
A4042	41682	41772	42491
2220	41701	41791	42492



Ordering Information

Polarizing Key	89-00-3001
Polarizing Peg	89-00-3002

Dimensions 6442

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.344 ± .007 8,74 ± 0,18	6	.968 ± .007 24,59 ± 0,18	10	1.592 ± .012 40,44 ± 0,31	14	2.216 ± .016 56,29 ± 0,41	18	2.840 ± .016 72,14 ± 0,41	22	3.464 ± .020 87,99 ± 0,51
3	.500 ± .007 12,70 ± 0,18	7	1.124 ± .007 28,55 ± 0,18	11	1.748 ± .012 44,40 ± 0,31	15	2.372 ± .016 60,25 ± 0,41	19	2.996 ± .016 76,10 ± 0,41	23	3.620 ± .020 91,95 ± 0,51
4	.656 ± .007 16,66 ± 0,18	8	1.280 ± .012 32,51 ± 0,31	12	1.904 ± .012 48,36 ± 0,31	16	2.528 ± .016 64,21 ± 0,41	20	3.152 ± .020 80,06 ± 0,51	24	3.776 ± .020 95,91 ± 0,51
5	.812 ± .007 20,62 ± 0,18	9	1.436 ± .012 36,47 ± 0,31	13	2.060 ± .014 52,31 ± 0,36	17	2.684 ± .016 68,17 ± 0,41	21	3.308 ± .020 84,02 ± 0,51		

Ordering Information 6442

Circuits	With Ramp	W/O Ramp	Circuits	With Ramp	W/O Ramp	Circuits	With Ramp	W/O Ramp	Circuits	With Ramp	W/O Ramp
2	• 26-03-4020	26-03-3021	8	• 26-03-4081	26-03-3081	14	• 26-03-4141	26-03-3141	20	• 26-03-4201	26-03-3201
3	• 26-03-4030	26-03-3031	9	• 26-03-4090	26-03-3091	15	• 26-03-4151	26-03-3151	21	• 26-03-4211	26-03-3211
4	• 26-03-4041	26-03-3041	10	• 26-03-4101	26-03-3101	16	• 26-03-4161	26-03-3161	22	• 26-03-4221	26-03-3221
5	• 26-03-4050	26-03-3051	11	• 26-03-4111	26-03-3111	17	• 26-03-4171	26-03-3171	23	• 26-03-4231	26-03-3231
6	• 26-03-4061	26-03-3061	12	• 26-03-4121	26-03-3121	18	• 26-03-4181	26-03-3181	24	• 26-03-4241	26-03-3241
7	• 26-03-4070	26-03-3071	13	• 26-03-4131	26-03-3131	19	• 26-03-4191	26-03-3191			

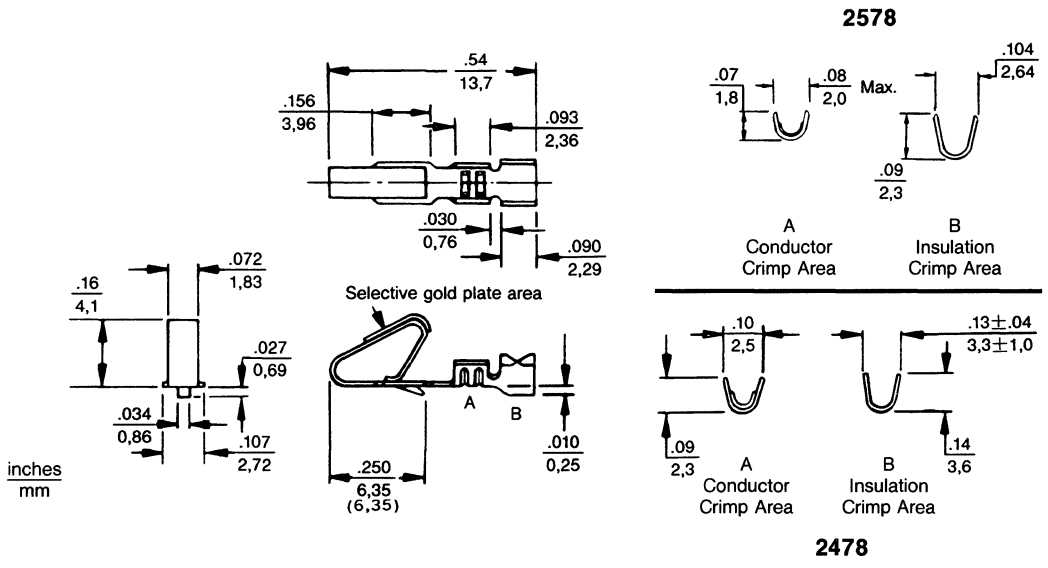
• U.S. Standard Product, available through Molex franchised distributors.

Crimp Terminals for .156" (3,96 mm) and .200" (5,08 mm) Housings

2478, 2578 Series

- Patented double cantilever design
- Accepts AWG 18 through 26 wire leads
- Complete line of terminal crimping equipment available. See Section M, this catalog
- For use with 2139, 3069 and 41695 Series housings; 2578 and 2478 terminals also used in 7664 and 7675 housings
- For .156" (3,96mm) and .200 (5,08mm) applications
- 2478 and 2578 available in Phosphor Bronze. See ordering information below.

E



Ordering Information 2478, 2578

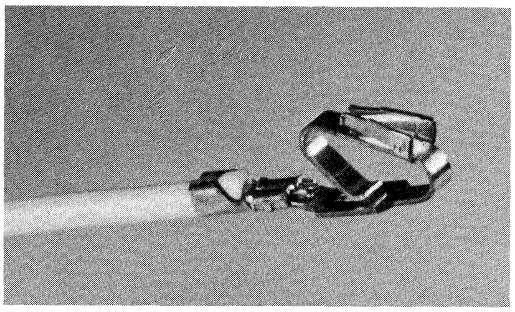
Wire Size	Insulation O.D.	Series	Material	Tin Plating		Gold Plating No. 1		Gold Plating No. 2	
				Loose	Chain	Loose	Chain	Loose	Chain
18-24	.110 Max. 2,79	2478	Phosphor Bronze	•08-52-0072	•08-52-0071	•08-58-0122	•08-58-0121	•08-65-0115	•08-65-0114
18-24	.110 Max. 2,79	2478	Brass	08-50-0106	08-50-0105	08-56-0106	08-56-0105	08-55-0104	08-55-0103
22-26	.065 Max. 1,65	2578	Phosphor Bronze	•08-50-0134	•08-50-0133	•08-58-0126	•08-58-0125	•08-65-0117	•08-65-0116
22-26	.065 Max. 1,65	2578	Brass	08-50-0108	08-50-0107	08-56-0108	08-56-0107	08-55-0106	08-55-0105

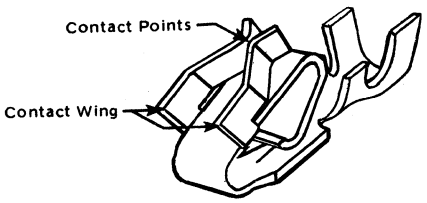
Recommended wire range assumes stranded wire
Plating No. 1 – 20 microinches min. gold in contact area with a flash overall.
Plating No. 2 – 15 microinches min. gold in contact area only.

• U.S. Standard Product, available through Molex franchised distributors.

Trifurcon Terminals for .156" (3,96 mm) Center Housing

An ideal choice for situations where flux contamination, high shock or vibration exists, this terminal incorporates the double cantilever design with contact wings in the vertical plane. Contact is achieved at three points on the mating pin. While insertion force of this combination is slightly increased, the extraction force is greatly increased and maintained through disconnect cycling



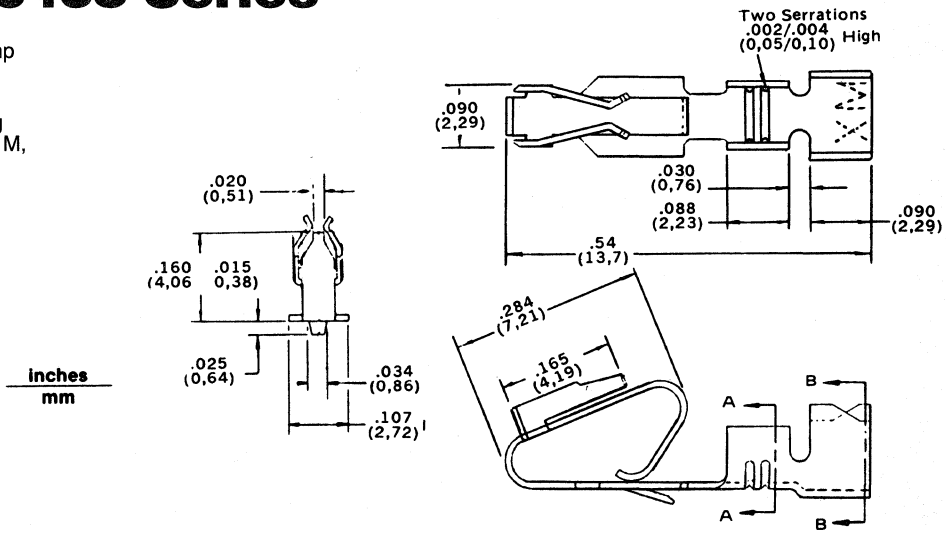


TRIFURCON TERMINAL

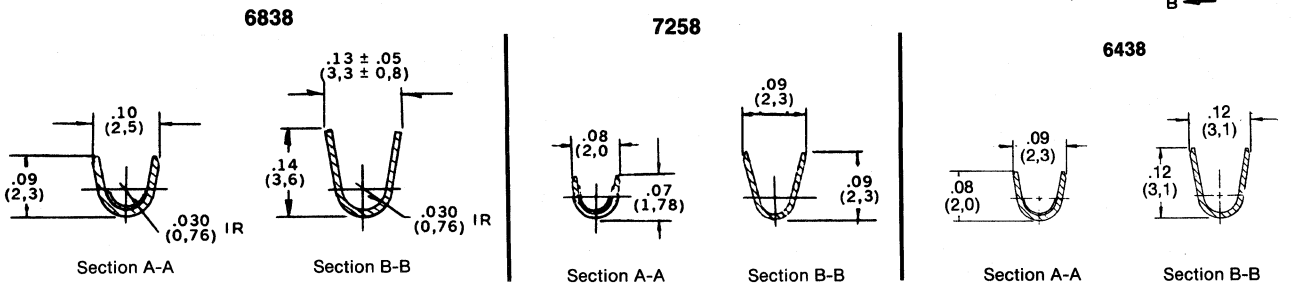
E

6838, 7258, 6438 Series

- For use with 41695 and 6442 crimp terminal housings, and 7674 and 7660 IDT housings
- Complete line of terminal crimping equipment available. See Section M, this catalog



Crimp Dimensions



Ordering Information 6838, 7258, 6438

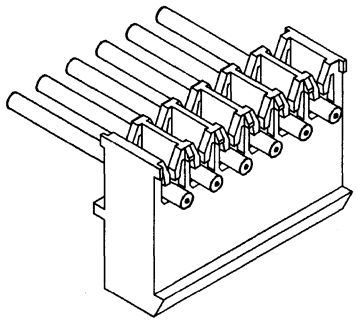
Wire Size	Insulation O.D.	Series	Material	Tin Plating		Gold Plating		Select Gold	
				Loose	Chain	Loose	Chain	Loose	Chain
18-24	.110 Max. 2,79	6838	Phosphor Bronze	•08-52-0113	•08-52-0112	•08-58-0189	•08-58-0187	•08-58-0111	•08-58-0110
18-24	.110 Max. 2,79	6838	Brass	08-50-0189	08-50-0187	—	—	—	—
22-26	.065 Max. 1,65	7258	Phosphor Bronze	•08-52-0125	•08-52-0124	•08-56-0124	•08-56-0123	•08-65-0122	•08-65-0121
22-26	.065 Max. 1,65	7258	Brass	08-50-0185	08-50-0183	—	—	—	—
18-24	.095 Max. 2,41	6438	Brass	08-50-0165	08-50-0164	08-56-0139	08-56-0137	—	—

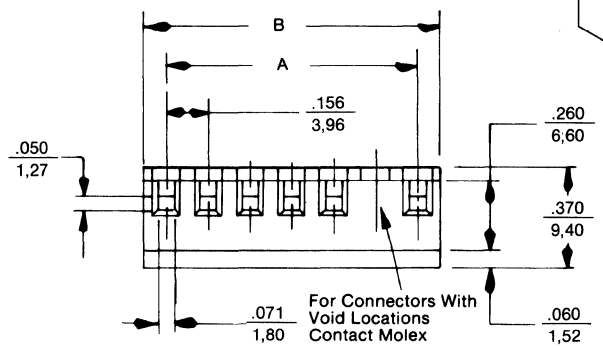
• U.S. Standard Product, available through Molex franchised distributors.

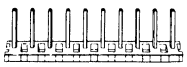
.156" (3,96 mm) Center Standard I.D.T. Connector

7675 Series
Double Cantilever Contact

- 2-24 Circuits
- Standard with locking ramp
- Feed-to and feed-thru versions
- Molded in strain reliefs
- Accepts wire O.D. from .045" (1,14mm) to .095" (2,41mm) max.
- Optional covers
- Optional polarizing keys and pegs
- Accepts solid and stranded wire
- Mates with standard .156" (3,96mm) center headers
- Also accepts crimp terminals 2478, 2578
- UL recognized (File #29179)

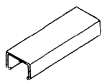




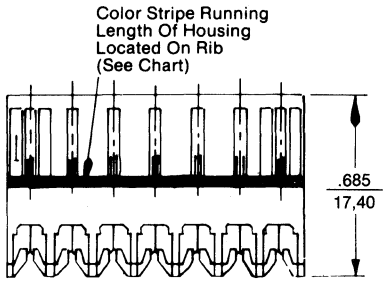


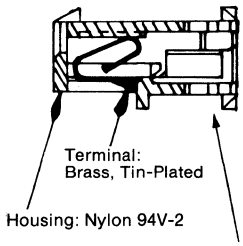
Headers

41661 41761
41662 41771
41681 41772
41682 41791
41741 41792



Covers
7894 Feed Thru





WIRE ENTRY DIRECTION
(Indicates housing location in application tooling.)

Polarizing Key
Order No. 15-04-0288

Polarizing Peg
Order No. 15-04-0291

inches
mm

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.156 ± .006 3,96 ± 0,15	.330 ± .007 8,38 ± 0,18	8	1.092 ± .008 27,74 ± 0,20	1.266 ± .009 32,16 ± 0,23	14	2.028 ± .011 51,51 ± 0,28	2.202 ± .011 55,93 ± 0,28	20	2.964 ± .013 75,29 ± 0,33	3.138 ± .013 79,70 ± 0,33
3	.312 ± .006 7,92 ± 0,15	.486 ± .007 12,34 ± 0,18	9	1.248 ± .008 31,70 ± 0,20	1.422 ± .009 36,12 ± 0,23	15	2.184 ± .011 55,47 ± 0,28	2.358 ± .011 59,89 ± 0,28	21	3.120 ± .014 79,25 ± 0,36	3.294 ± .014 83,67 ± 0,36
4	.468 ± .006 11,89 ± 0,15	.642 ± .007 16,31 ± 0,18	10	1.404 ± .010 35,66 ± 0,25	1.578 ± .010 40,08 ± 0,25	16	2.340 ± .011 59,44 ± 0,28	2.514 ± .011 63,86 ± 0,28	22	3.276 ± .014 83,21 ± 0,36	3.450 ± .014 87,63 ± 0,36
5	.624 ± .007 15,85 ± 0,18	.798 ± .008 20,27 ± 0,20	11	1.560 ± .010 39,62 ± 0,25	1.734 ± .010 44,04 ± 0,25	17	2.496 ± .012 63,40 ± 0,30	2.670 ± .012 67,82 ± 0,30	23	3.432 ± .014 87,17 ± 0,36	3.606 ± .014 91,59 ± 0,36
6	.780 ± .007 19,81 ± 0,18	.954 ± .008 24,23 ± 0,20	12	1.716 ± .010 43,59 ± 0,25	1.890 ± .010 48,00 ± 0,25	18	2.652 ± .013 67,36 ± 0,33	2.826 ± .013 71,78 ± 0,33	24	3.588 ± .016 91,14 ± 0,41	3.762 ± .016 95,55 ± 0,41
7	.932 ± .007 23,77 ± 0,18	1.110 ± .009 28,19 ± 0,23	13	1.872 ± .010 47,55 ± 0,25	2.046 ± .011 51,97 ± 0,28	19	2.808 ± .013 71,32 ± 0,33	2.982 ± .013 75,74 ± 0,33			

Ordering Information

ORDERING NUMBER FORMULA

09-0 X - X XX X

- With Locking Ramp - 6 / Without Locking Ramp 7
- Wire Type and Color Code (See Chart 1)
- Number of Circuits 02-24
- Feed-Thru 7 / Feed-To 8

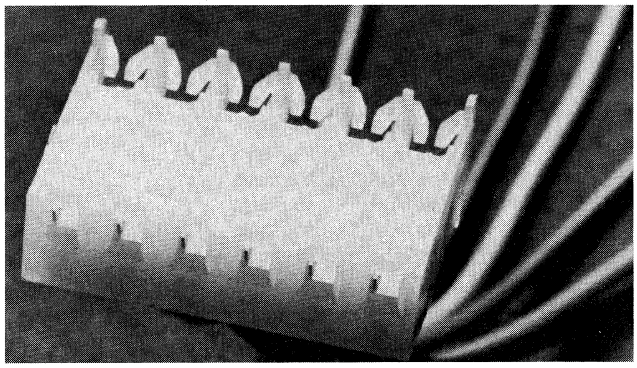
CHART 1 (General Reference*)		
Ordering Suffix No.	Color	Type of Wire Terminated [All wires have a maximum Insulation Diameter of .095" (4,41mm)]
09-0X-0XXX	Yellow	#18 GA Solid or Fused Stranded
09-0X-1XXX	Red	#20 GA Solid or Fused Stranded and #18 GA Stranded Wire
09-0X-2XXX	Blue	#20 GA Stranded Wire
09-0X-3XXX	Green	#26 and #27 GA Stranded, Fused Stranded and Solid Wire or #24 GA Stranded Wire
09-0X-5XXX	Black	#24 and #22 GA Solid or Fused Stranded and #22 GA Stranded Wire

*Some wires require deviation from chart.

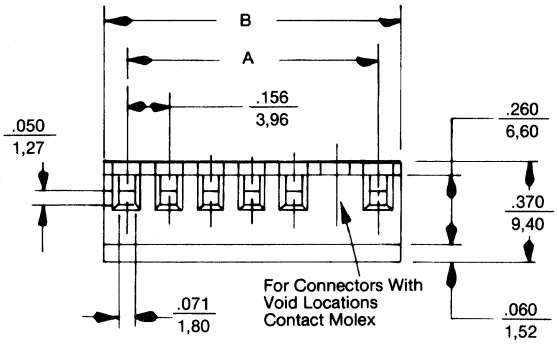
Recommended Molex ribbon cable for use with 7675 Series: Eng. Nos. 7382, 7517, 40174, 8868.

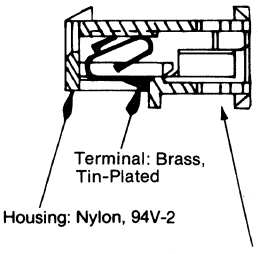
.156" (3,96 mm) Center Standard Insulation Displacement Connector

7674 Series
3 Point Trifurcon Contact



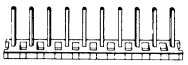
- 2-16 Circuits
- 3 Points of contact
- Standard with locking ramp
- Feed-to and feed-thru versions
- Molded in strain reliefs
- Accepts wire O.D. from .045" (1,14mm) to .095" (2,41mm) max.
- Optional polarizing keys and pegs
- Accepts solid and stranded wire
- Mates with standard .156" (3,96mm) center headers
- Also accepts crimp terminals 6838, 7258
- UL recognized (File #E29179)





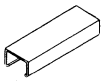
WIRE ENTRY DIRECTION
(Indicates housing location in application tooling.)

inches
mm



Headers

41661 41761
41662 41771
41681 41772
41682 41791
41741 41792



Covers

7894 Feed Thru

Polarizing Key
Order No. 15-04-0288

Polarizing Peg
Order No. 15-04-0291

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.156 ± .006 3,96 ± 0,15	.330 ± .007 8,38 ± 0,18	6	.780 ± .007 19,81 ± 0,18	.954 ± .008 24,23 ± 0,20	10	1.404 ± .010 35,66 ± 0,25	1.578 ± .010 40,08 ± 0,25	14	2.028 ± .011 51,51 ± 0,28	2.202 ± .011 55,93 ± 0,28
3	.312 ± .006 7,92 ± 0,15	.486 ± .007 12,34 ± 0,18	7	.932 ± .007 23,77 ± 0,18	1.110 ± .009 28,19 ± 0,23	11	1.560 ± .010 39,62 ± 0,25	1.734 ± .010 44,04 ± 0,25	15	2.184 ± .011 55,47 ± 0,28	2.358 ± .011 59,89 ± 0,28
4	.468 ± .006 11,89 ± 0,15	.642 ± .007 16,31 ± 0,18	8	1.092 ± .008 27,74 ± 0,20	1.266 ± .009 32,16 ± 0,23	12	1.716 ± .010 43,59 ± 0,25	1.890 ± .010 48,00 ± 0,25	16	2.340 ± .011 59,44 ± 0,28	2.514 ± .011 63,86 ± 0,28
5	.624 ± .007 15,85 ± 0,18	.798 ± .008 20,27 ± 0,20	9	1.248 ± .008 31,70 ± 0,20	1.422 ± .009 36,12 ± 0,23	13	1.872 ± .010 47,55 ± 0,25	2.046 ± .011 51,97 ± 0,28			

Ordering Information

ORDERING NUMBER FORMULA

09-0 X - X XX X

- With Locking Ramp 6 / Without Locking Ramp 7
- Wire Size and Color Code (See Chart 1)
- Number of Circuits 02-16
- Feed-Thru 9 / Feed-To 0

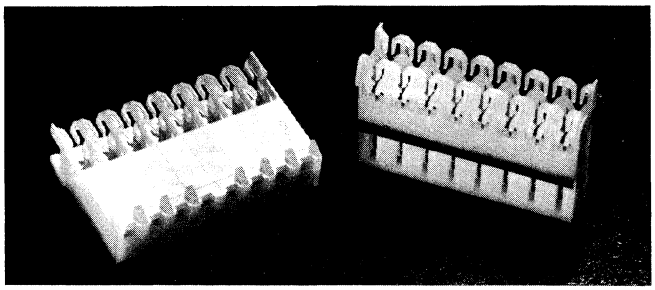
CHART 1 (General Reference*)		
Ordering Suffix No.	**Color**	**Type of Wire Terminated [All wires have a maximum Insulation Diameter of .095" (2,41mm)]**
09-0X-0XXX	Yellow	#18 GA Solid or Fused Stranded
09-0X-1XXX	Red	#20 GA Solid or Fused Stranded and #18 GA Stranded Wire
09-0X-2XXX	Blue	#20 GA Stranded Wire
09-0X-3XXX	Green	#26 and #27 GA Stranded, Fused Stranded and Solid Wire or #24 GA Stranded Wire
09-0X-5XXX	Black	#24 and #22 GA Solid or Fused Stranded and #22 GA Stranded Wire

*Some wires require deviation from chart.

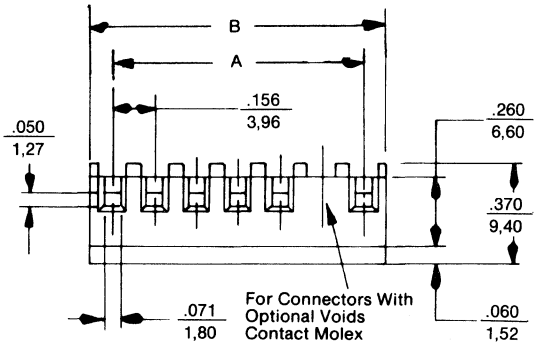
Recommended Molex ribbon cable for use with 7674 Series: Eng. Nos. 7382, 7517, 40174, 8868.

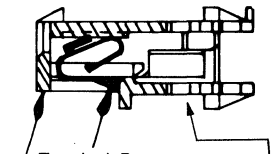
.156" (3,96 mm) Center Harness Board Connector

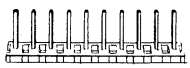
7660 Series
3 Point
Trifurcon Contact



- 2-16 Circuits
- 3 Points of contact
- Standard with locking ramp
- Mates with standard .156" (3,96mm) center headers
- Molded in strain reliefs
- Accepts wire O.D. from .045" (1,14mm) to .095" (2,41mm) max.
- Feed-thru version available with or without covers
- Feed-to version available with cover
- Optional polarizing keys and pegs
- Accepts solid and stranded wire
- Also accepts crimp terminals 6838, 7258
- UL recognized (File #E29179)

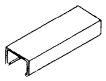






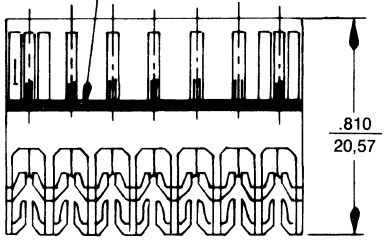
Headers

41661 41761
41662 41771
41681 41772
41682 41791
41741 41792



Covers

7896 Feed To



WIRE ENTRY DIRECTION
(Indicates housing location in application tooling.)

Polarizing Key
Order No. 15-04-0288

Polarizing Peg
Order No. 15-04-0291

inches
mm

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.156 ± .006 3,96 ± 0,15	.330 ± .007 8,38 ± 0,18	6	.780 ± .007 19,81 ± 0,18	.954 ± .008 24,23 ± 0,20	10	1.404 ± .010 35,66 ± 0,25	1.578 ± .010 40,08 ± 0,25	14	2.028 ± .011 51,51 ± 0,28	2.202 ± .011 55,93 ± 0,28
3	.312 ± .006 7,92 ± 0,15	.486 ± .007 12,34 ± 0,18	7	.932 ± .007 23,77 ± 0,18	1.110 ± .009 28,19 ± 0,23	11	1.560 ± .010 39,62 ± 0,25	1.734 ± .010 44,04 ± 0,25	15	2.184 ± .011 55,47 ± 0,28	2.358 ± .011 59,89 ± 0,28
4	.468 ± .006 11,89 ± 0,15	.642 ± .007 16,31 ± 0,18	8	1.092 ± .008 27,74 ± 0,20	1.266 ± .009 32,16 ± 0,23	12	1.716 ± .010 43,59 ± 0,25	1.890 ± .010 48,00 ± 0,25	16	2.340 ± .011 59,44 ± 0,28	2.514 ± .011 63,86 ± 0,28
5	.624 ± .007 15,85 ± 0,18	.798 ± .008 20,27 ± 0,20	9	1.248 ± .008 31,70 ± 0,20	1.422 ± .009 36,12 ± 0,23	13	1.872 ± .010 47,55 ± 0,25	2.046 ± .011 51,97 ± 0,28			

Ordering Information

ORDERING NUMBER FORMULA

09-0 X - X XX 6

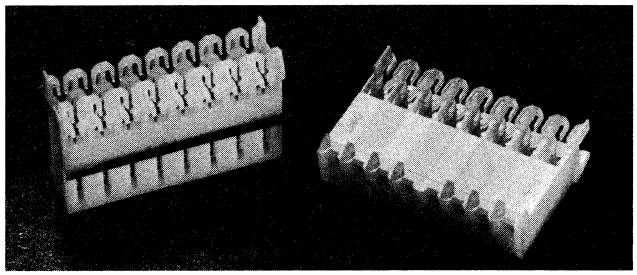
- Locking Ramp Option: With Ramp 6 / Without Ramp 7
- Wire Size and Color Code (See Chart 1)
- Number of Circuits 02-16

CHART 1 (General Reference*)		
Ordering Suffix No.	**Color**	**Type of Wire Terminated [All wires have a maximum Insulation Diameter of .095" (2,41mm)]**
09-0X-0XX6	Yellow	#18 GA Solid or Fused Stranded
09-0X-1XX6	Red	#20 GA Solid or Fused Stranded and #18 GA Stranded Wire
09-0X-2XX6	Blue	#20 GA Stranded Wire
09-0X-3XX6	Green	#26 and #27 GA Stranded, Fused Stranded and Solid Wire or #24 GA Stranded Wire
09-0X-4XX6	Brown	#28 GA Solid Wire
09-0X-5XX6	Black	#24 and #22 GA Solid or Fused Stranded and #22 GA Stranded Wire

*Some wires require deviation from chart.

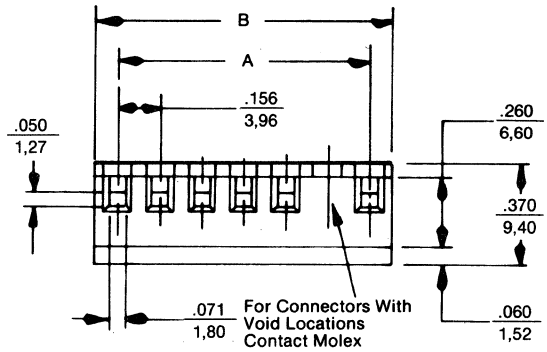
.156" (3,96 mm) Center Harness Board Connector

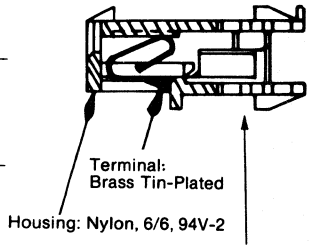
7664 Series
Double Cantilever Contact



- 2-24 Circuits
- Standard with locking ramp
- Mates with standard .156" (3,96mm) center headers
- Molded in wire retainers
- Molded in strain relief
- Accepts wire O.D. from .045" (1,14mm) to .095" (2,41mm) max.
- Feed-thru version available with or without cover
- Feed-to version available with cover
- Optional polarizing keys and pegs
- Accepts solid and stranded wire
- Also accepts crimp terminals 2478, 2578
- UL recognized (File #E29179)

E







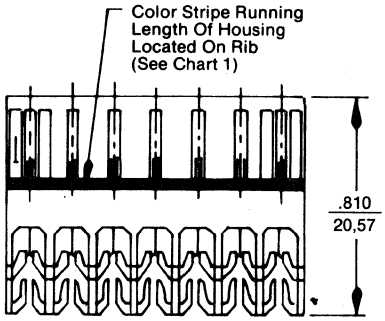
Headers

41661 41761
41662 41771
41681 41772
41682 41791
41741 41792



Covers

7896 Feed To



WIRE ENTRY DIRECTION
(Indicates housing location in application tooling.)

inches
mm

Polarizing Key
Order No. 15-04-0288

Polarizing Peg
Order No. 15-04-0291

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.156 ± .006 3,96 ± 0,15	.330 ± .007 8,38 ± 0,18	8	1.092 ± .008 27,74 ± 0,20	1.266 ± .009 32,16 ± 0,23	14	2.028 ± .011 51,51 ± 0,28	2.202 ± .011 55,93 ± 0,28	20	2.964 ± .013 75,29 ± 0,33	3.138 ± .013 79,70 ± 0,33
3	.312 ± .006 7,92 ± 0,15	.486 ± .007 12,34 ± 0,18	9	1.248 ± .008 31,70 ± 0,20	1.422 ± .009 36,12 ± 0,23	15	2.184 ± .011 55,47 ± 0,28	2.358 ± .011 59,89 ± 0,28	21	3.120 ± .014 79,25 ± 0,36	3.294 ± .014 83,67 ± 0,36
4	.468 ± .006 11,89 ± 0,15	.642 ± .007 16,31 ± 0,18	10	1.404 ± .010 35,66 ± 0,25	1.578 ± .010 40,08 ± 0,25	16	2.340 ± .011 59,44 ± 0,28	2.514 ± .011 63,86 ± 0,28	22	3.276 ± .014 83,21 ± 0,36	3.450 ± .014 87,63 ± 0,36
5	.624 ± .007 15,85 ± 0,18	.798 ± .008 20,27 ± 0,20	11	1.560 ± .010 39,62 ± 0,25	1.734 ± .010 44,04 ± 0,25	17	2.496 ± .012 63,40 ± 0,30	2.670 ± .012 67,82 ± 0,30	23	3.432 ± .014 87,17 ± 0,36	3.606 ± .014 91,59 ± 0,36
6	.780 ± .007 19,81 ± 0,18	.954 ± .008 24,23 ± 0,20	12	1.716 ± .010 43,59 ± 0,25	1.890 ± .010 48,00 ± 0,25	18	2.652 ± .013 67,36 ± 0,33	2.826 ± .013 71,78 ± 0,33	24	3.588 ± .016 91,14 ± 0,41	3.762 ± .016 95,55 ± 0,41
7	.932 ± .007 23,77 ± 0,18	1.110 ± .009 28,19 ± 0,23	13	1.872 ± .010 47,55 ± 0,25	2.046 ± .011 51,97 ± 0,28	19	2.808 ± .013 71,32 ± 0,33	2.982 ± .013 75,74 ± 0,33			

Ordering Information

ORDERING NUMBER FORMULA

09-0 X - X XX 5

- With Locking Ramp - 6
- Without Locking Ramp - 7
- Wire Type and Color Code (See Chart 1)
- Number of Circuits 02-24

CHART 1 (General Reference*)		
Ordering Suffix No.	Color	Type of Wire Terminated [All wires have a maximum Insulation Diameter of .095" (2,41mm)]
09-0X-0XX5	Yellow	#18 GA Solid or Fused Stranded
09-0X-1XX5	Red	#20 GA Solid or Fused Stranded and #18 GA Stranded Wire
09-0X-2XX5	Blue	#20 GA Stranded Wire
09-0X-3XX5	Green	#26 and #27 GA Stranded, Fused Stranded and Solid Wire or #24 GA Stranded Wire
09-0X-5XX5	Black	#24 and #22 GA Solid or Fused Stranded and #22 GA Stranded Wire

*Some wires require deviation from chart.

.156" (3,96 mm) Center P.C. Board Connectors

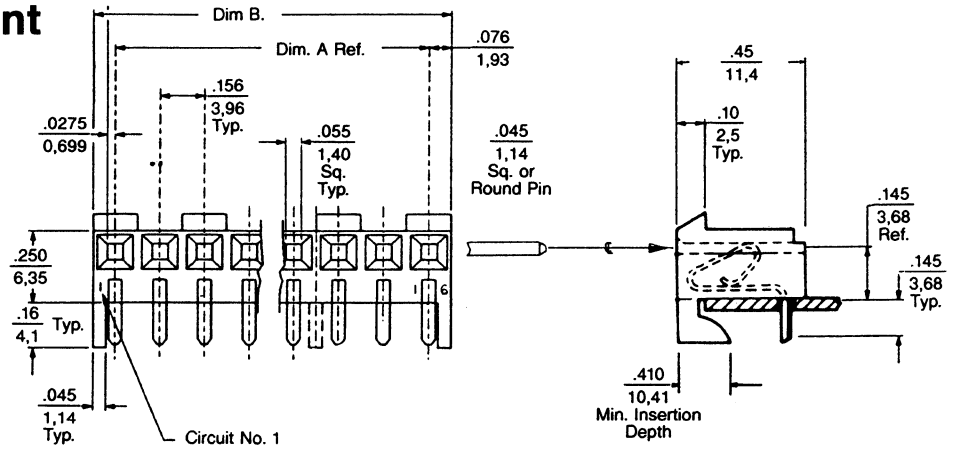
41815

Right Angle Mount Type A

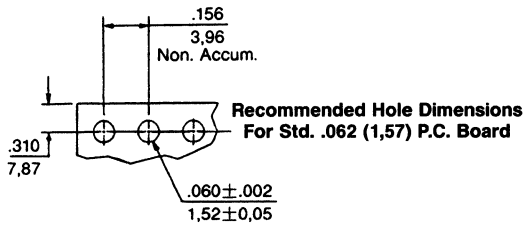
- 3-15 circuits
- Large lead-in chamfers
- 94V-0 **polyester** housing
- Mates with Molex KK .156" (3,96mm) center headers or .045" (1,14mm) staked pins
- Tin plating or select gold

Mates with:

3192	41671	41741	41772
41661	41701	41761	41791
41662	41711	41771	41792



Polarizing Key Order No. • 15-04-0297



Recommended Hole Dimensions For Std. .062 (1,57) P.C. Board

Ordering Information 41815 Type A

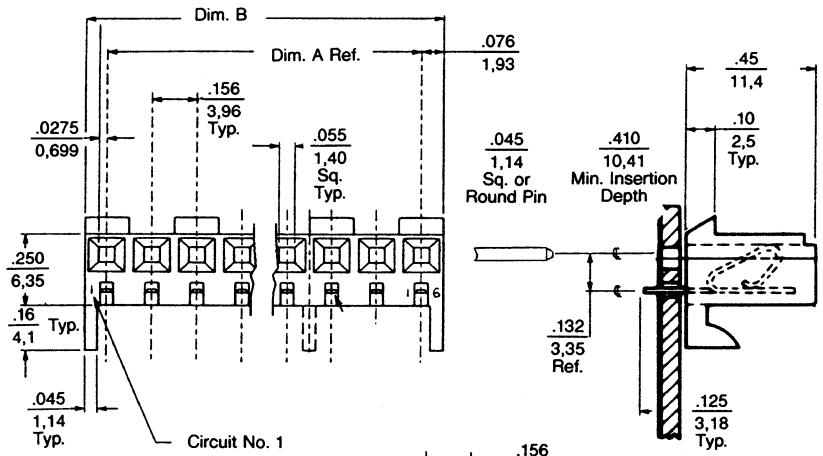
Tin Order No. • 09-48-2**XX**1
Select Gold Order No. • 09-48-3**XX**5
Replace "**XX**" with number of circuits, 03-15

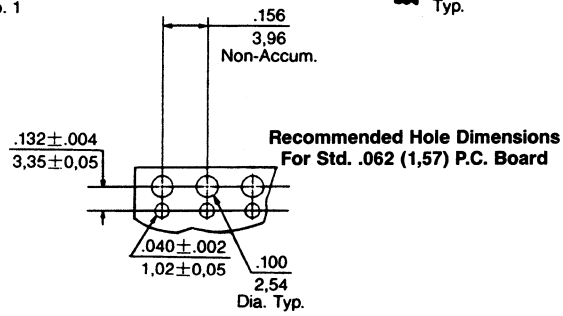
• U.S. Standard Product, available through Molex franchised distributors.

41815

Bottom Entry Connector Type B

- 3-15 circuits
- Large lead-in chamfers
- 94V-0 **polyester** housing
- Mates with Molex KK .156" (3,96mm) center headers or .045" (1,14mm) staked pins
- Tin plating or select gold
- Consult factory for mating headers





Recommended Hole Dimensions For Std. .062 (1,57) P.C. Board

Ordering Information 41815 Type B

Tin Order No. • 09-48-2**XX**2
Select Gold Order No. • 09-48-3**XX**4
Replace "**XX**" with number of circuits, 03-15

• U.S. Standard Product, available through Molex franchised distributors.

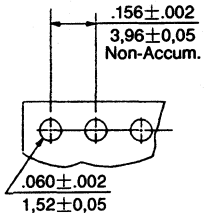
Dimensional Information 41815 Type A and Type B Use Table on Next Page

.156" (3,96 mm) Center P.C. Board Connectors

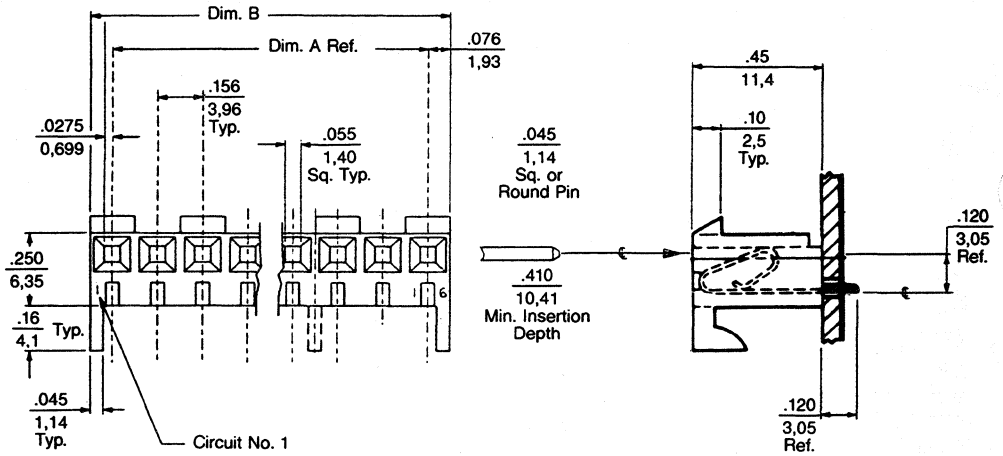
41815

Top Entry Connector Type C

- 3-15 circuits
- Large lead-in chamfers
- Top entry mount
- 94V-0 **polyester** housing
- Mates with Molex KK .156" (3,96mm) center headers or .045" (1,14mm) staked pins
- Tin plating or select gold
- Available with hooks removed, contact factory



Recommended Hole Dimensions For Std. .062 (1,57) P.C. Board



Polarizing Key Order No. • 15-04-0297

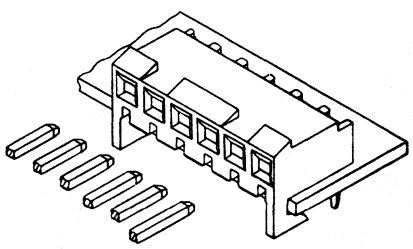
Ordering Information 41815 Type C

Tin Order No. • 09-48-2XX3
Select Gold Order No. • 09-48-3XX6
Replace "XX" with number of circuits, 03-15

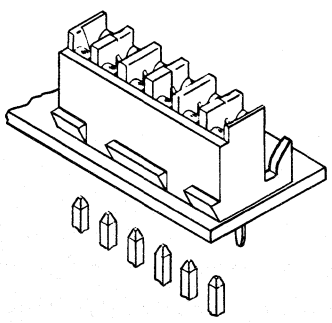
• U.S. Standard Product, available through Molex franchised distributors.

Dimensions 41815 Type A, B and C

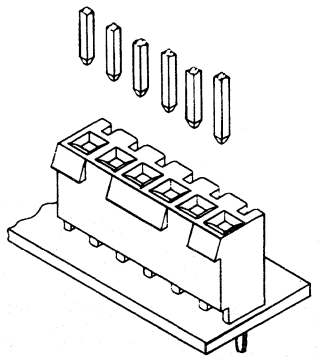
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
3	.312 7,92	.464 ± .010 11,79 ± 0,25	7	.936 23,77	1.088 ± .012 27,64 ± 0,30	11	1.560 39,62	1.712 ± .012 43,48 ± 0,30	15	2.184 55,47	2.336 ± .014 59,33 ± 0,36
4	.468 11,89	.620 ± .010 15,75 ± 0,25	8	1.092 27,74	1.244 ± .012 31,60 ± 0,25	12	1.716 43,59	1.868 ± .012 47,45 ± 0,30			
5	.624 15,85	.776 ± .101 19,7 ± 0,25	9	1.248 31,70	1.400 ± .012 35,56 ± 0,30	13	1.872 47,55	2.024 ± .012 51,41 ± 0,30			
6	.780 19,81	9.32 ± .010 23,67 ± 0,25	10	1.404 35,66	1.556 ± .012 39,52 ± 0,30	14	2.028 51,50	2.180 ± .014 55,37 ± 0,36			



Side Entry



Bottom Entry



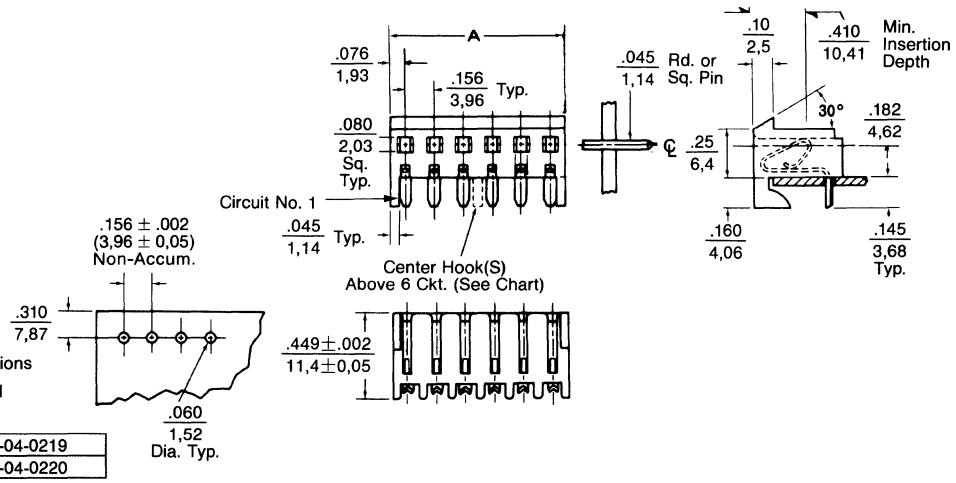
Top Entry

.156" (3,96 mm) Center P.C. Board Connectors

2145-A/3215-A Series
Side Entry Type A

- 3-15 circuits
- 94V-2 **nylon** housing (94V-0 housing available. See 41815A Series, page 53E)
- Mates with Molex KK .156" (3,96mm) center headers and .045" (1,14mm) pins

Mating headers
3192 41671
41661 41662
41672



Polarizing Key	Order No. • 15-04-0219
Polarizing Peg	Order No. • 15-04-0220

Ordering Information 2145-A
(Preferred version in the Americas)

Tin/Lead Order No. • 09-52-3XX1
Select Gold Order No. • 09-62-3XX1
Replace XX with number of circuits, 03-15

• U.S. Standard Product, available through Molex franchised distributors

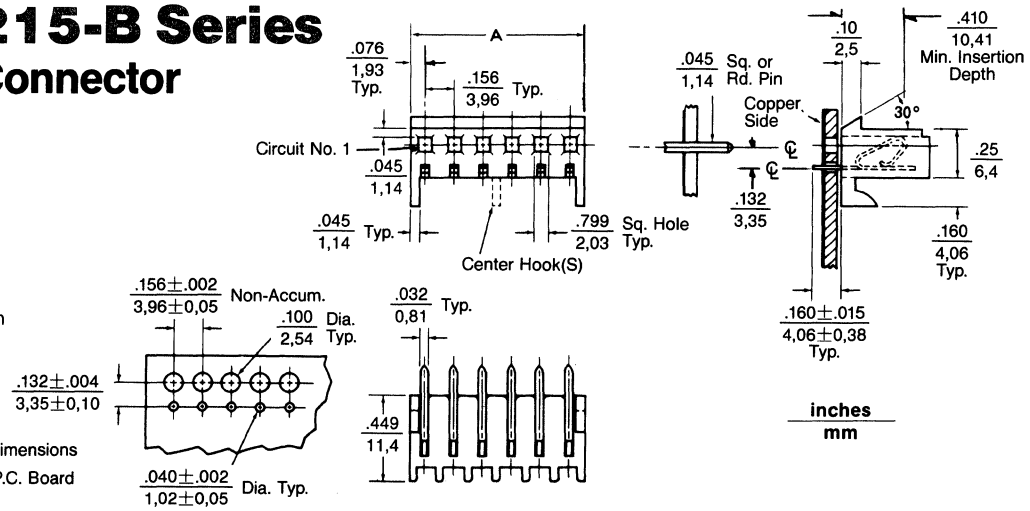
Ordering Information 3215-A
(Preferred version in the Europe and the Far East)

Tin Order No. 26-11-6XX4
Replace XX with number of circuits, 03-15

*For Gold Plating Contact Factory Representative

2145-B/3215-B Series
Bottom Entry Connector Type B

- 3-15 circuits
- 94V-2 **nylon** housing (94V-0 housing available. See 41815B Series, page 53E)
- Mates with Molex KK .156" (3,96mm) center headers
- Mating headers require longer pin lengths, please contact factory



Ordering Information 2145-B
(Preferred version in the Americas)

Tin/Lead Order No. • 09-52-3XX2
Select Gold Order No. • 09-62-3XX2
Replace XX with number of circuits, 03-15

• U.S. Standard Product, available through Molex franchised distributors

Ordering Information 3215-B
(Preferred version in the Europe and the Far East)

Tin Order No. 26-11-6XX5
Replace XX with number of circuits, 03-15

*For Gold Plating Contact Factory Representative

Dimensions 2145-A/3215-A and 2145-B/3215-B Use Table on Next Page

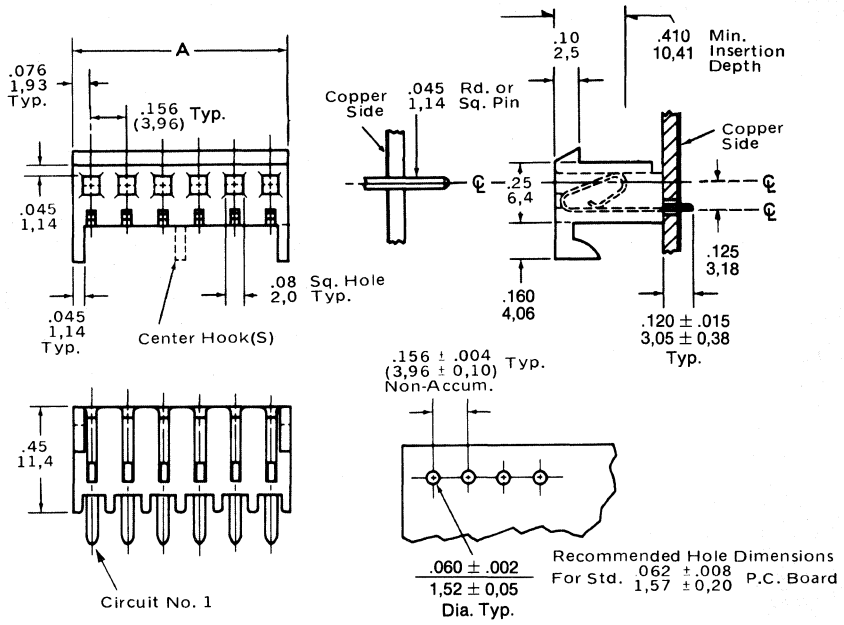
.156" (3,96 mm) Center P.C. Board Connectors

2145-C/3215-C Series

Top Entry Connector Style C

- 3-15 circuits
- Top entry mount
- 94V-2 **nylon** housing (94V-0 housing available. See 41815C Series, page 54E)
- Mates with Molex KK .156" (3,96mm) center locking headers
- Available without locking ramp or hook, contact factory

E



inches
mm

Polarizing Key for Top and Side Entry Connectors	
Eng. No.	**Order No.**
2560-1	• 15-04-0219

• U.S. Standard Product, available through Molex franchised distributors

Ordering Information 2145-C
(Preferred version in the Americas)

Tin Order No. • 09-52-3**XX**3
Select Gold Order No. • 09-62-3**XX**3
Replace **XX** with number of circuits, 03-15

• U.S. Standard Product, available through Molex franchised distributors

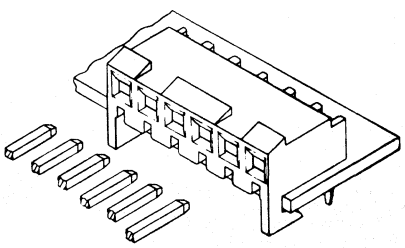
Ordering Information 3215-C
(Preferred version in the Europe and the Far East)

Tin* Order No. 26-11-2**XX**3
Replace **XX** with number of circuits, 03-15

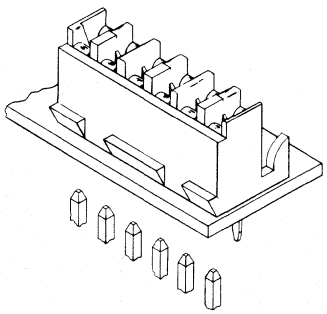
*For Gold Plating Contact Factory Representative

Dimensions 2145A-B-C Versions and 3215-A-B-C Versions

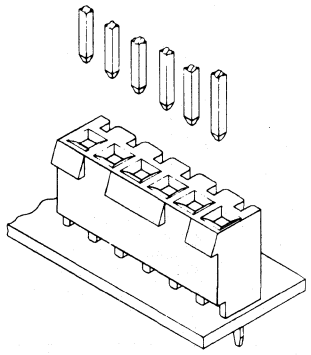
Circuits	Dim. A	Center Hook(s) Location	Circuits	Dim. A	Center Hook(s) Location	Circuits	Dim. A	Center Hook(s) Location
3	.46 ± .010 11,7 ± 0,25	—	7	1.09 ± .012 27,8 ± 0,30	—	10	1.56 ± .012 39,6 ± 0,30	(1) Between Ckts. 5-6
4	.62 ± .010 15,8 ± 0,25	—	8	1.24 ± .012 31,5 ± 0,30	(1) Between Ckts. 4-5	12	1.87 ± .012 47,5 ± 0,30	(2) Between Ckts. 4-5 & 8-9
5	.78 ± .010 19,8 ± 0,25	—	9	1.40 ± .012 35,6 ± 0,30	(1) Between Ckts. 4-5	15	2.34 ± .014 59,4 ± 0,36	(2) Between Ckts. 5-6 & 10-11
6	.93 ± .010 23,6 ± 0,25	—						



Side Entry



Bottom Entry

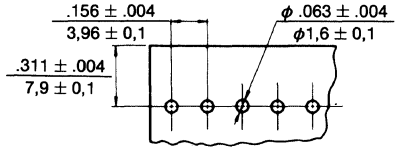


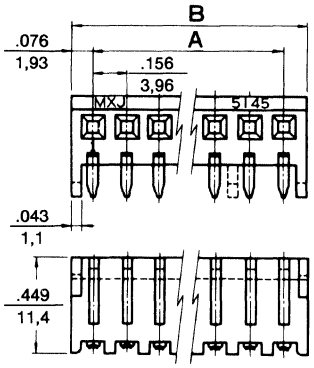
Top Entry

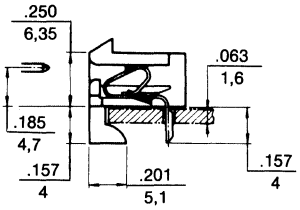
.156" (3,96 mm) Center P.C. Board Connectors

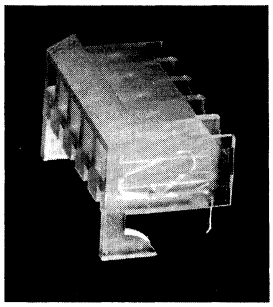
5145-NAH
Right Angle Mount

- Mates with Molex 5271 header
- Material: nylon 6/6, 94V-2







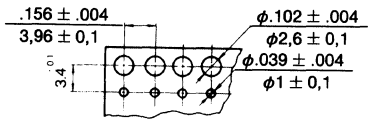


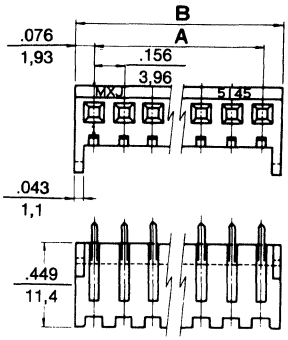
Ordering Information 5145-NAH
(Preferred version in the Far East)

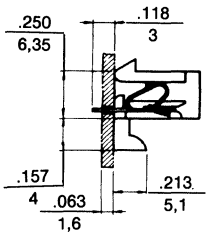
Order No. 26-01-1XX6
Replace XX with number of circuits, 02-12

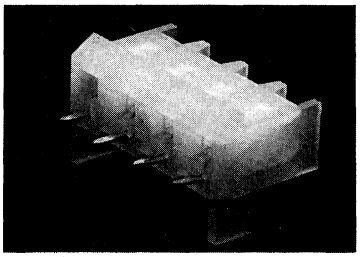
5145-NBH
Bottom Entry

- Mates with Molex 41661-ANC header







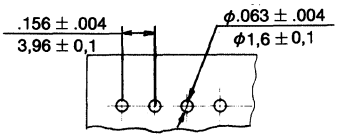


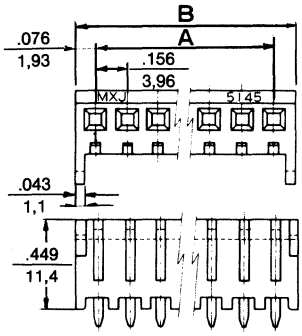
Ordering Information 5145-NBN
(Preferred version in the Far East)

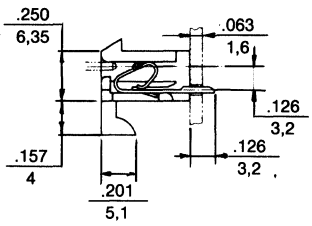
Order No. 26-01-1XX8
Replace XX with number of circuits, 02-12

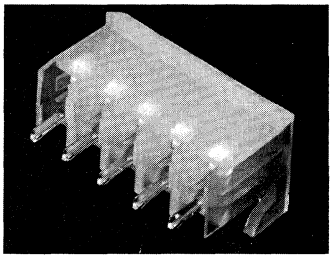
5145-NCH
Top Entry

- Mates with Molex 5271 header









Ordering Information 5145-NCH
(Preferred version in the Far East)

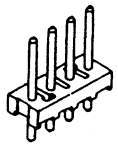
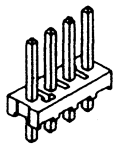
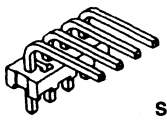
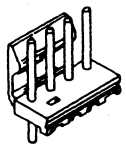
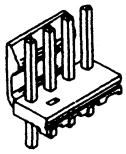
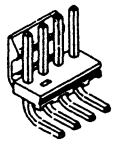
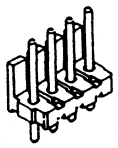
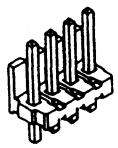
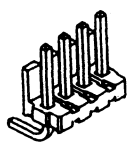
Order No. 26-01-1XX9
Replace XX with number of circuits, 02-12

Dimensions 5145-NAH/NBH/NCH

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.156 3,96	.308 7,82	5	.624 15,84	.776 19,80	8	1.091 27,72	1.243 31,58	10	1.403 35,64	1.555 39,50
3	.312 7,92	.464 11,78	6	.780 19,80	.931 23,66	9	1.247 31,68	1.399 35,54	12	1.715 43,56	1.870 47,42
4	.468 11,88	.620 15,74	7	.935 23,76	1.087 27,62						

.156" (3,96 mm) Center Headers

Product Selection Guide

		SOLID POLYESTER	SOLID POLYESTER w/PEGS	BREAKAWAY POLYESTER
		2-18 Ckts.[1]	2-18 CKts.[1]	2-24 Ckts[1]
 Round	**Flat**	**A-41741**	**A-42441**	**A-41701**
	Tin	• 26-60-0**XX**0	26-64-0**XX**0	26-51-0**XX**1
	Gold	• 26-61-0**XX**0	26-65-0**XX**0	26-51-2**XX**0 • 24 Ckt. Only
 Square	**Flat**	**A-41771**	**A-42471**	**A-41661**
	Tin	• 26-60-2**XX**0	26-64-2**XX**0	26-48-1**XX**1
	Gold	• 26-61-2**XX**0	26-65-2**XX**0	26-48-2**XX**1 • 24 Ckt. Only
 Square	**Flat**	**A-41772**	**A-42472**	**A-41662**
	Tin	• 26-60-3**XX**0	26-64-3**XX**0	26-48-1**XX**2
	Gold	• 26-61-3**XX**0	26-65-3**XX**0	26-48-2**XX**2 • 24 Ckt. Only
 Round	**Friction Lock**	**A-41761**	**A-42461**	**A-41711**
	Tin	• 26-60-1**XX**0	26-64-1**XX**0	26-51-0**XX**2
	Gold	• 26-61-1**XX**0	26-65-1**XX**0	26-51-2**XX**2 • 24 Ckt. Only
 Square	**Friction Lock**	**A-41791**	**A-42491**	**A-41671**
	Tin	• 26-60-4**XX**0	26-64-4**XX**0	26-48-1**XX**5
	Gold	• 26-61-4**XX**0	26-65-4**XX**0	26-48-2**XX**5 • 24 Ckt. Only
 Square	**Friction Lock**	**A-41792**	**A-42492**	**A-41672[2]**
	Tin	• 26-60-5**XX**0	26-64-5**XX**0	26-48-1**XX**6
	Gold	• 26-61-5**XX**0	26-65-5**XX**0	26-48-2**XX**6 • 24 Ckt. Only
 Round	**Polarizing Wall**			**A-41721**
	Tin	N/A	N/A	26-51-0**XX**3
	Gold	N/A	N/A	26-51-2**XX**3 • 24 Ckt. Only
 Square	**Polarizing Wall**			**A-41681**
	Tin	N/A	N/A	26-48-1**XX**3
	Gold	N/A	N/A	26-48-2**XX**3 • 24 Ckt. Only
 Square	**Polarizing Wall**			**A-41682**
	Tin	N/A	N/A	26-48-1**XX**4
	Gold	N/A	N/A	26-48-2**XX**4 • 24 Ckt. Only

NOTES: [1] Replace "**XX**" with Circuit Size.
[2] 41672 must be mounted at board edge.

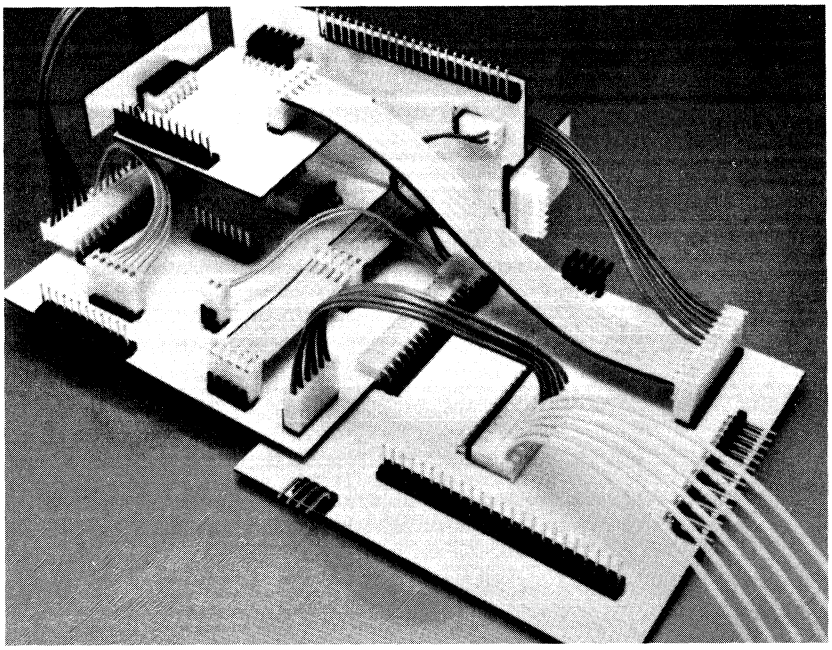
[3]• U.S. Standard Product, available through Molex franchised distributors.
Crosses are closest dimensional equivalent. See drawing for exact dimensions.

.156" (3,96 mm) Center Breakaway Headers

These Molex low cost, industry compatible .156" headers simplify ordering and inventory management.

With tin or gold plated .045" pins, the headers may be purchased cut to specific circuit size from our factory or in full 24 circuit sticks and broken to desired size(s) by the customer.

- □ 2-24 circiuts
- □ Friction lock and polarizing backwalls available
- □ .045" (1,14mm) square straight or right angle pins
- □ .045" (1,14mm) dia. round straight pins
- □ Stackable end-to-end on .156" (3,96mm) center line
- □ Voids available in any circuit location(s). Contact factory
- □ Dimensioned for automated insertion into PC board



E

Specifications

Materials — Molded glass filled polyester housing, brass pins

Flammability Rating — UL 94V-0

Color — Black

Temperature Rating — -40°F to 221°F (-40°C to 105°C)

Pin Pushout Force — 3 pounds minimum prior to soldering

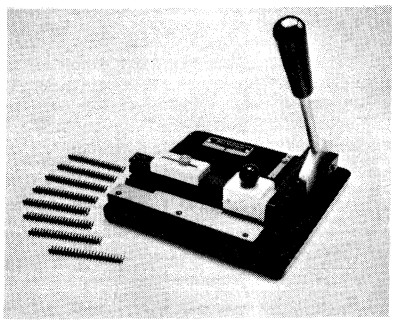
Plating — **Standard Tin:** 200 microinches (5 μm) minimum tin over 100 microinches (2.5 μm) minimum copper

Standard Gold: 20 microinches (.51 μm) gold over 30 microinches (.76 μm) minimum nickel

Agency Approvals— UL File #E29179. CSA File #19980

Application Tooling

- □ Manual tool is capable of cutting Molex header series 41661, 41662, 41671, 41672, 41681, 41682 to desired circuit size
- □ Tool indexes and cuts 24-circuit parts to lengths of 2-23 circuits with simple set-up adjustment



Ordering Information

Manual Tool		Replacement Blade	
Eng. No.	Order No.	Eng. No.	Order No.
AM-60594	11-20-0901	AM-60594-18	11-31-7504

Dimensions

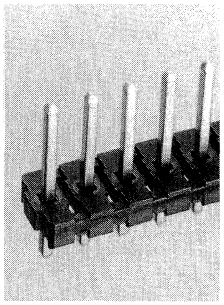
Circuits	Dim. A Ref.	Dim. B Ref.	Circuits	Dim. A Ref.	Dim. B Ref.	Circuits	Dim. A Ref.	Dim. B Ref.	Circuits	Dim. A Ref.	Dim. B Ref.
2	.156 3,96	.267/.310 6,78/7,87	8	1.092 27,74	1.203/1.246 30,56/31,65	14	2.028 51,51	2.139/2.182 54,33/55,42	20	2.964 75,29	3.075/3.118 78,11/79,20
3	.312 7,92	.423/.466 10,74/11,84	9	1.248 31,70	1.359/1.402 34,52/35,61	15	2.184 55,47	2.295/2.338 58,29/59,39	21	3.120 79,25	3.231/3.274 82,07/83,16
4	.468 11,89	.579/.622 14,71/15,80	10	1.404 35,66	1.515/1.558 38,48/39,57	16	2.340 59,44	2.451/2.494 62,26/63,35	22	3.276 83,21	3.387/3.430 86,03/87,12
5	.624 15,85	.735/.778 18,67/19,76	11	1.560 39,62	1.671/1.714 42,44/43,54	17	2.496 63,40	2.607/2.650 66,22/67,31	23	3.432 87,17	3.541/3.586 89,94/91,08
6	.780 19,81	.891/.934 22,63/23,72	12	1.716 43,59	1.827/1.870 46,41/47,50	18	2.652 67,36	2.763/2.806 70,18/71,27	24	3.588 91,14	3.695/3.740 93,85/95,00
7	.936 23,77	1.047/1.090 26,59/27,69	13	1.872 47,55	1.983/2.026 50,37/51,46	19	2.808 71,32	2.919/2.962 74,14/75,23			

.156" (3,96 mm) Center Breakaway Headers

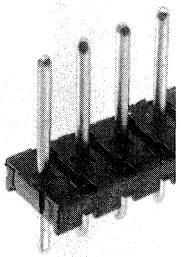
41661/41701 Series

Straight Pin Header

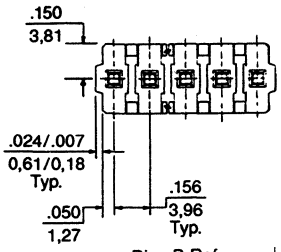
- Preferred over Molex 2461 and 2402 (09-67-1XX3 and 09-64-1XX1)
- .045" (1,4mm) square pins or .045" diameter round pins
- **94V-0 material**
- 2-24 circuits available

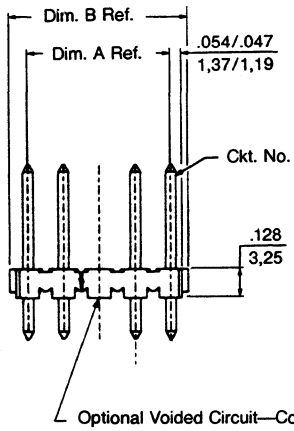


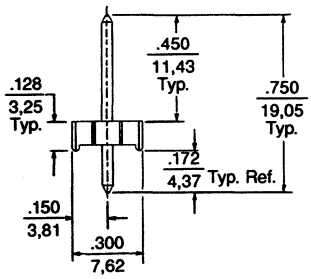
41661

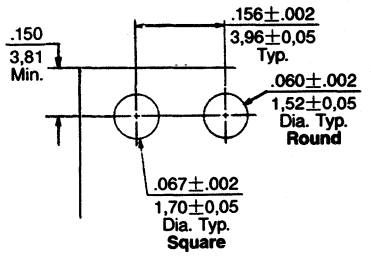


41701









Recommended PC Board Hole Layout
41661 and 41701

Ordering Information 41661

Square Pin	Order No.
Tin	26-48-1**XX**1
Gold	26-48-2**XX**1
Replace "**XX**" with number of circuits desired, 02-24	

Ordering Information 41701

Round Pin	Order No.
Tin	26-51-0**XX**1
Gold	26-51-2**XX**0
Replace "**XX**" with number of circuits desired, 02-24	

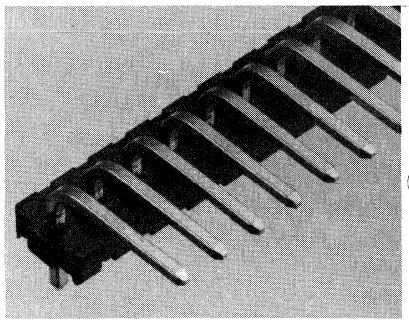
- The 24 circuit header is the U.S. Standard Product available through Molex franchised distributors.

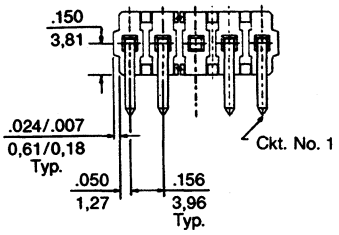
NOTES:
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 57E for Dim. A and Dim. B

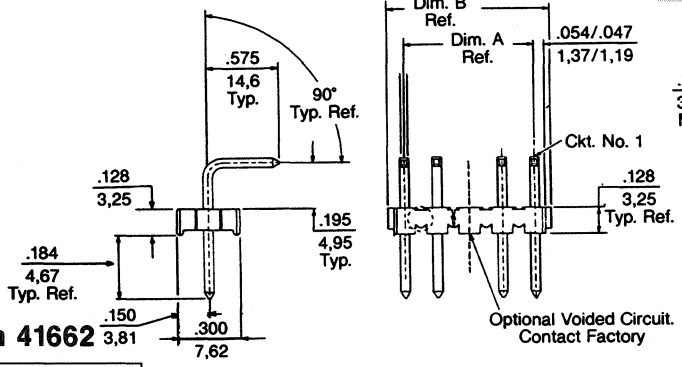
41662 Series

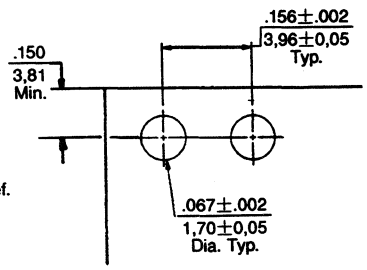
Right Angle Pin Header

- Preferred over 2373 (09-66-1XX1)
- **94V-0 material**
- 2-24 circuits available









Recommended P.C Board Hole Layout
41662

Ordering Information 41662

Square Pin	Order No.
Tin	26-48-1**XX**2
Gold	26-48-2**XX**2
Replace "**XX**" with number of circuits desired, 02-24	

- The 24 circuit header is the U.S. Standard Product available through Molex franchised distributors.

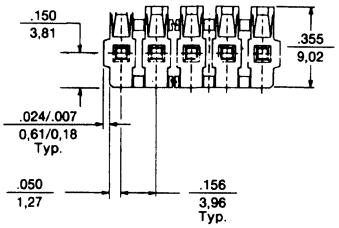
NOTES:
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 57E for Dim. A and Dim. B

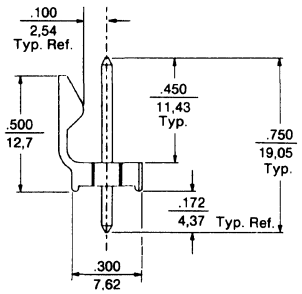
.156" (3,96 mm) Center Pin Breakaway Headers

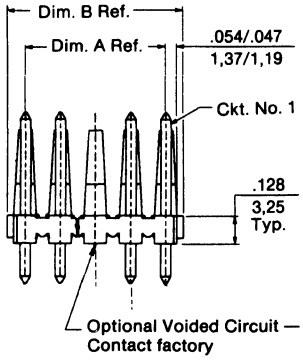
41671/41711 Series

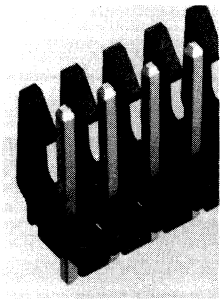
Straight Pin Friction Lock Header

- Preferred over Molex 2630 and 2391 (09-74-1XX1 and 09-65-1XX1)
- .045" (1,14mm) square pins or .045" diameter round pins
- **94V-0 material**
- 2-24 circuits available

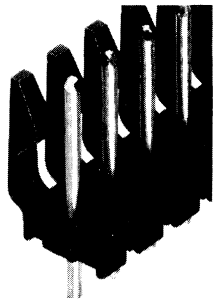




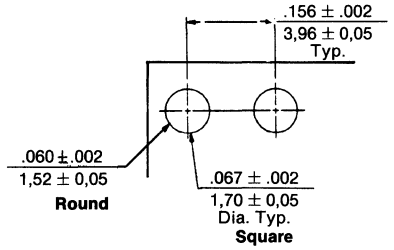




41671



41711



Recommended PC Board Hole Layout
41671 and 41711

Ordering Information 41671

Square Pin	Order No.
Tin	26-48-1**XX**5
Gold	26-48-2**XX**5
Replace **XX** with number of circuits desired, 02-24	

Ordering Information 41711

Round Pin	Order No.
Tin	26-51-0**XX**2
Gold	26-51-2**XX**2
Replace **XX** with number of circuits desired, 02-24	

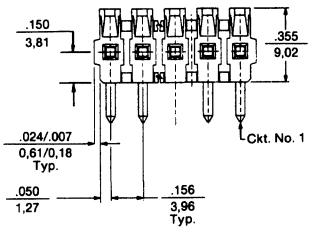
• The 24 circuit header is the U.S. Standard Product available through Molex franchised distributors.

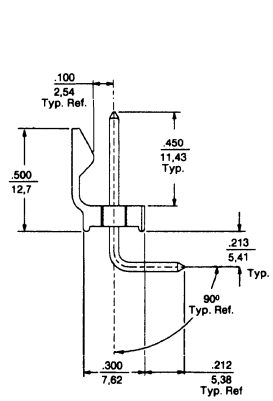
NOTES:
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 57E for Dim. A and Dim. B

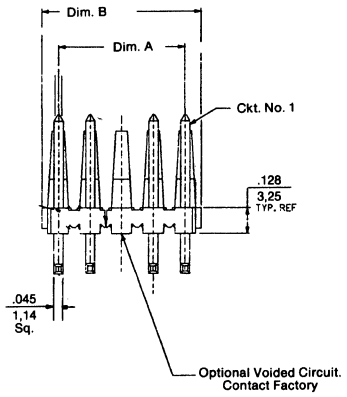
41672 Series

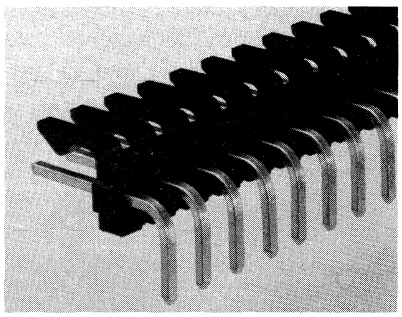
Right Angle Pin Friction Lock Header

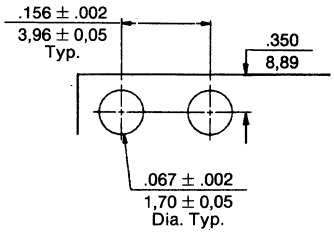
- **Edgemount only**
- Preferred over Molex 2420 (09-75-1XX8)
- **94V-0 material**
- 2-24 circuits available











Recommended PC Board Hole Layout
41672
Edge Mount Only

Ordering Information 41672

Square Pin	Order No.
Tin	26-48-1**XX**6
Gold	26-48-2**XX**6
Replace **XX** with number of circuits desired, 02-24	

• The 24 circuit header is the U.S. Standard Product available through Molex franchised distributors.

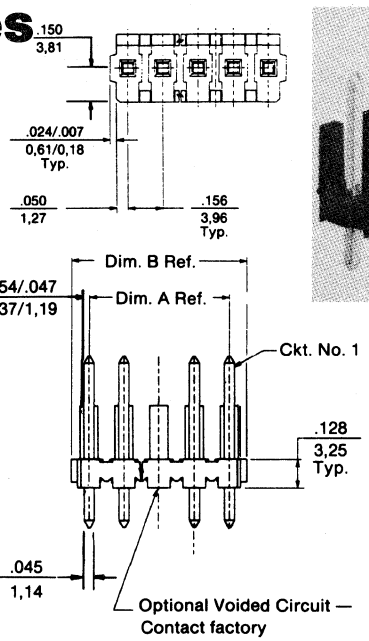
NOTES:
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 57E for Dim. A and Dim. B

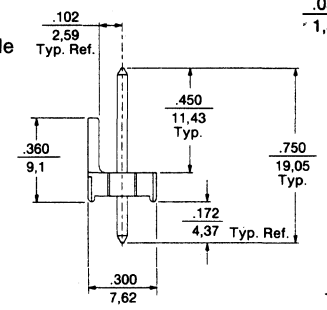
.156" (3,96 mm) Center Breakaway Headers

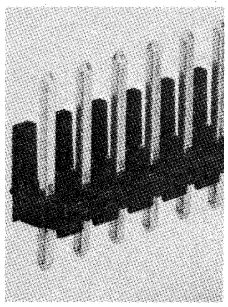
41681/41721 Series

Straight Pin Polarizing Wall Header

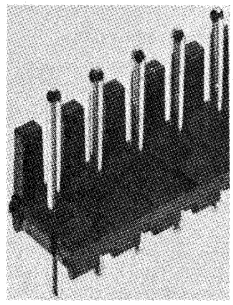
- Preferred over Molex 2403 and 6393 (09-60-1XX1 and 09-88-1XX1)
- .045" (1,14mm) square pins or .045" diameter round pins
- **94V-0 material**
- 2-24 circuits available



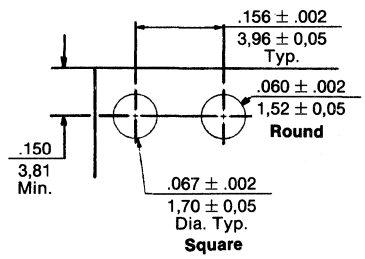




41681



41721



Recommended PC Board Hole Layout
41681 and 41721

Ordering Information 41681

Square Pin	Order No.
Tin	26-48-1XX3
Gold	26-48-2XX3
Replace XX with number of circuits desired, 02-24	

Ordering Information 41721

Round Pin	Order No.
Tin	26-51-0XX3
Gold	26-51-2XX3
Replace XX with number of circuits desired, 02-24	

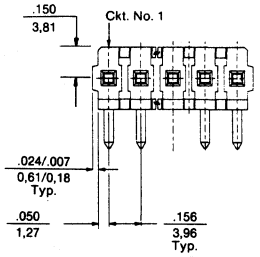
• The 24 circuit header is the U.S. Standard Product available through Molex franchised distributors.

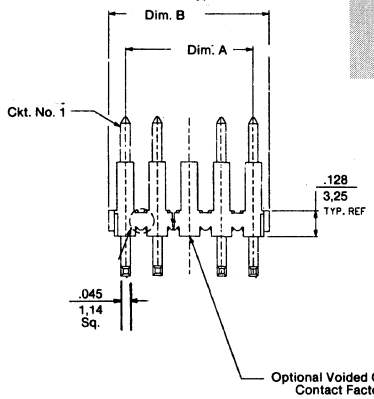
NOTES:
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 57E for Dim. A and Dim. B

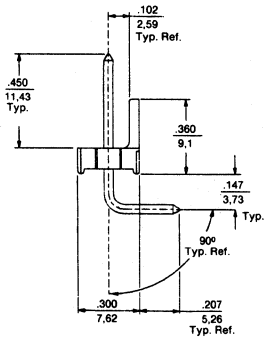
41682 Series

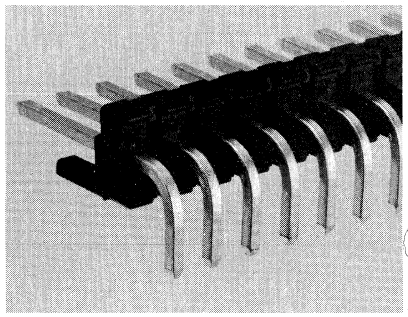
Right Angle Pin Polarizing Wall Header

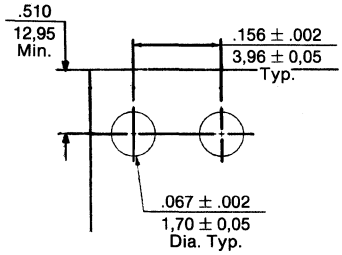
- Preferred over Molex 2534 (09-88-2XX1)
- **94V-0 material**
- 2-24 circuit available











Recommended PC Board Hole Layout
41682

Ordering Information 41682

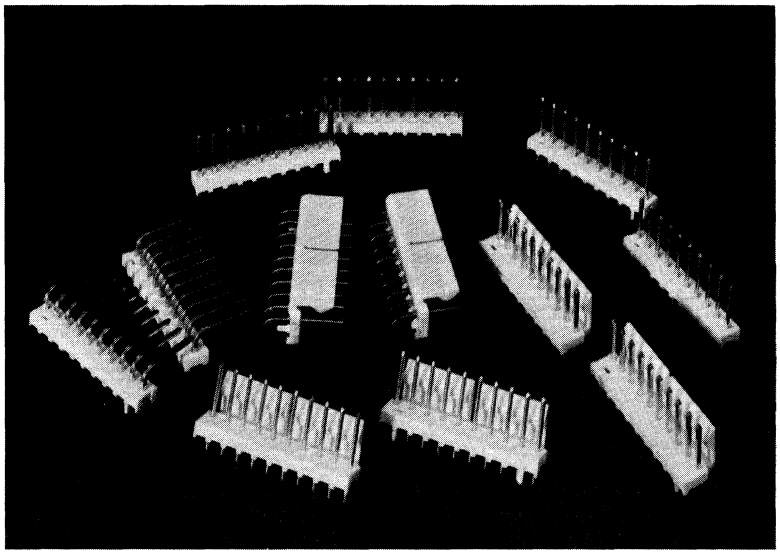
Square Pin	Order No.
Tin	26-48-1XX4
Gold	26-48-2XX4
Replace XX with number of circuits desired, 02-24	

• The 24 circuit header is the U.S. Standard Product available through Molex franchised distributors.

NOTES:
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 57E for Dim. A and Dim. B

.156″ (3,96 mm) Center Non-Breakaway Headers

- 2-18 circuits
- Optional printed circuit board retention pegs
- Friction lock backwall and flat versions available
- .045″ (1,14mm) square straight or right angle pins
- .045″ (1,14mm) dia. round straight pins
- Stackable end-to-end on .156″ (3,96mm) center line
- Voids available in any circuit location(s). Contact factory
- Dimensioned for automated insertion into PC board



E

Specifications

Materials:
Molded glass filled polyester housing, brass pins

Flammability Rating:
UL 94V-0

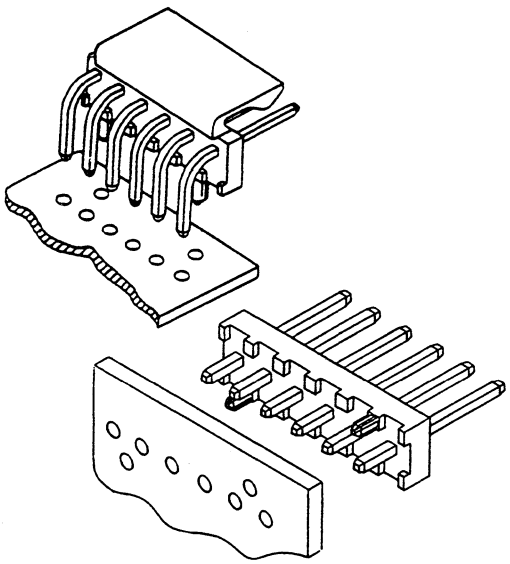
Color:
Natural White

Temperature Rating:
−40°F to 221°F
(−40°C to 105°C)

Pin Pushout Force:
3 pounds minimum prior to soldering

Plating:
Standard Tin — 200 microinches (5μm) minimum tin over 100 microinches (2,5μm) minimum copper

Standard Gold — 20 microinches (.51μm) gold over 30 microinches (.76μm) minimum nickel

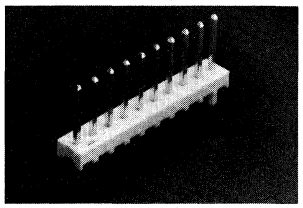


Dimensions

Circuits	Dim. A	Dim. B	No. of Pegs	Circuits	Dim. A	Dim. B	No. of Pegs	Circuits	Dim. A	Dim. B	No. of Pegs
2	.156 3,96	.306 7,77	1	8	1.092 27,74	1.242 31,55	2	14	2.028 51,51	2.178 55,32	2
3	.312 7,92	.462 11,73	2	9	1.248 31,70	1.398 35,51	2	15	2.184 55,47	2.334 59,28	2
4	.468 11,89	.618 15,70	2	10	1.404 35,66	1.554 39,47	2	16	2.340 59,44	2.490 63,25	2
5	.624 15,85	.774 19,66	2	11	1.560 39,62	1.710 43,43	2	17	2.496 63,40	2.646 67,21	2
6	.780 19,81	.930 23,62	2	12	1.716 43,59	1.866 47,40	2	18	2.652 67,36	2.802 71,17	2
7	.936 23,77	1.086 27,58	2	13	1.872 47,55	2.022 51,36	2				

.156" (3,96 mm) Center Headers

42471 Series
Straight Square Pin Header with Pegs

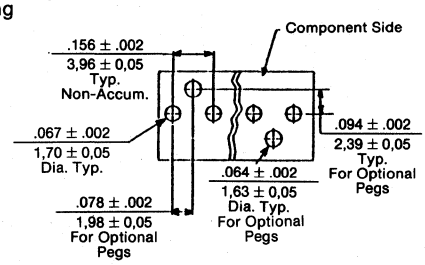


With Molded Retention Pegs

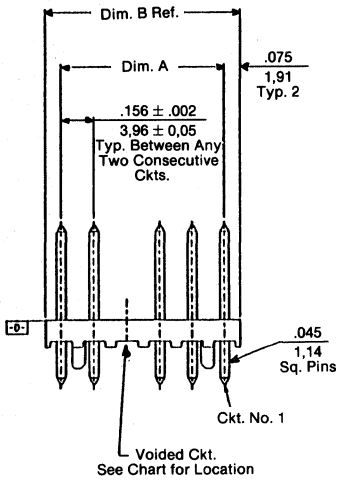
- Preferred over Molex 2461 and 2402 (09-67-1XX3 and 09-64-1XX1)
- .045" (1,14mm) square pins
- **Polyester 94V-0 material**
- 2-18 circuits
- Pegs provide retention to printed circuit board during handling and soldering

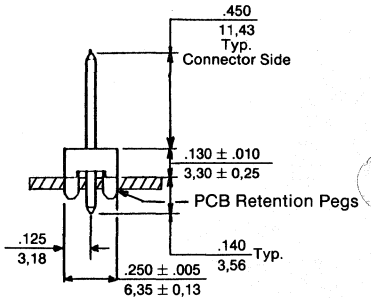
Mates with:

2139	7664
2145	7674
3069	7675
6442	41695
7660	41815



Recommended PC Board Hole Layout



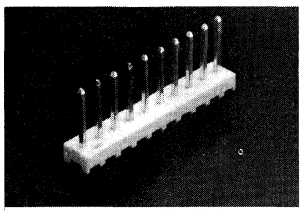


Ordering Information

	Order No.
Tin	26-64-2**XX**0
Gold	26-65-2**XX**0
Replace **XX** with number of circuits desired, 02-18	

NOTES:
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 61E for Dim. A and Dim. B
3. Two pegs for ckt. sizes 3-18. One peg for ckt. size 2.

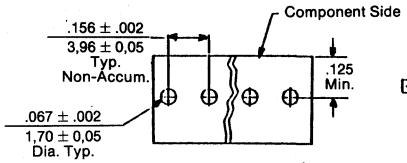
41771 Series
Straight Square Pin Header



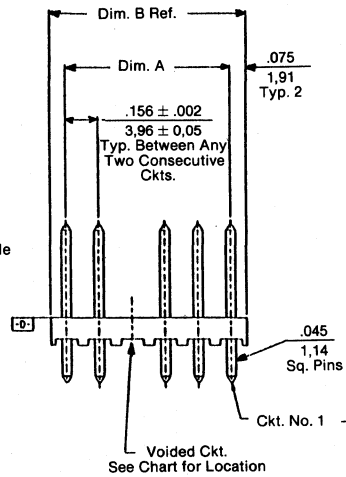
- Preferred over Molex 2461 and 2402 (09-67-1XX3 and 09-64-1XX1)
- .045" (1,14mm) square pins
- **Polyester 94V-0 material**
- 2-18 circuits

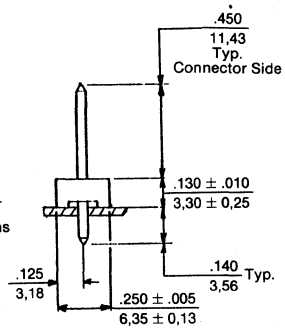
Mates with:

2139	7664
2145	7674
3069	7675
6442	41695
7660	41815



Recommended PC Board Hole Layout





Ordering Information

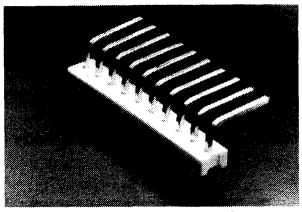
	Order No.
Tin	• 26-60-2**XX**0
Gold	• 26-61-2**XX**0
Replace **XX** with number of circuits desired, 02-18	

• U.S. Standard Product, available through Molex franchised distributors.

NOTES:
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 61E for Dim. A and Dim. B

.156" (3,96 mm) Center Header

42472 Series
Right Angle Square Pin Header with Pegs

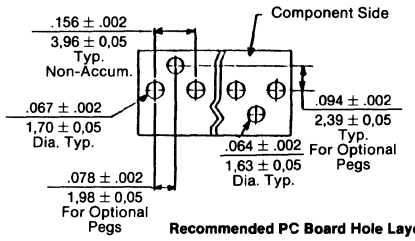


With Molded Retention Pegs

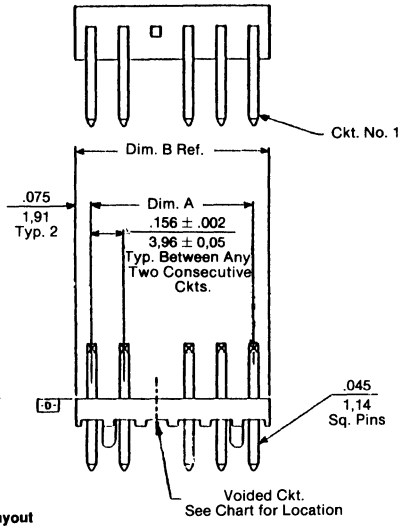
- Preferred over Molex 2373 (09-66-1XX1)
- .045" (1,14mm) square pins
- **Polyester 94V-0 material**
- 2-18 circuits
- Pegs provide retention to printed circuit board during handling and soldering

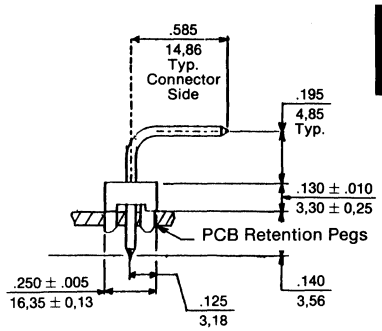
Mates with

2139	7664
2145	7674
3069	7675
6442	41695
7660	41815



Recommended PC Board Hole Layout



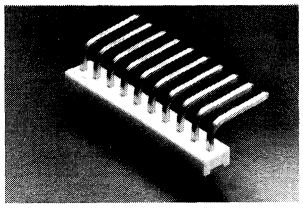


Ordering Information

	Order No.
Tin	26-64-3**XX**0
Gold	26-65-3**XX**0
Replace **XX** with number of circuits desired, 02-18	

NOTES:
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 61E for Dim. A and Dim. B
3. Two pegs for ckt. sizes 3-18. One peg for ckt. size 2.

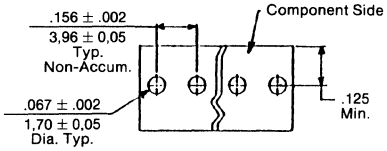
41772 Series
Right Angle Square Pin Header



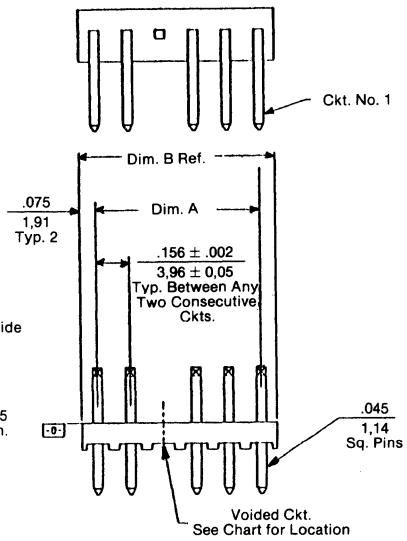
- Preferred over Molex 2373 (09-66-1XX1)
- .045" (1,14mm) square pins
- **Polyester 94V-0 material**
- 2-18 circuits

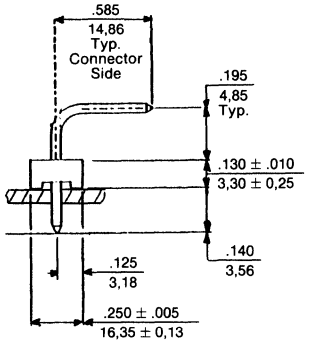
Mates with

2139	7664
2145	7674
3069	7675
6442	41695
7660	41815



Recommended PC Board Hole Layout





Ordering Information

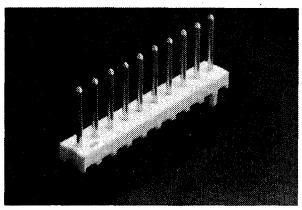
	Order No.
Tin	• 26-60-3**XX**0
Gold	• 26-61-3**XX**0
Replace **XX** with number of circuits desired, 02-18	

• U.S. Standard Product, available through Molex franchised distributors.

NOTES:
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 61E for Dim. A and Dim. B

.156" (3,96 mm) Center Headers

42441 Series
Straight Round Pin Header with Pegs

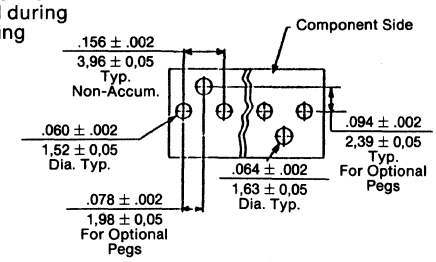


With Molded Retention Pegs

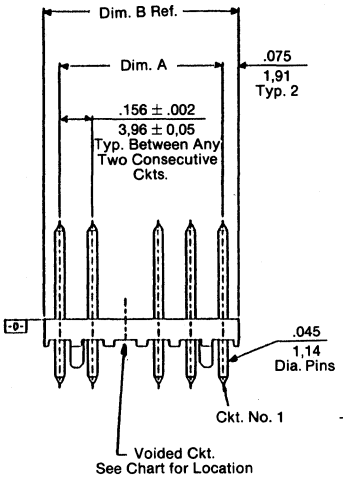
- Preferred over Molex 2402 (09-64-1XX1)
- .045" (1,14mm) diameter round pins
- **Polyester 94V-0 material**
- 2-18 circuits
- Pegs provide retention to printed circuit board during handling and soldering

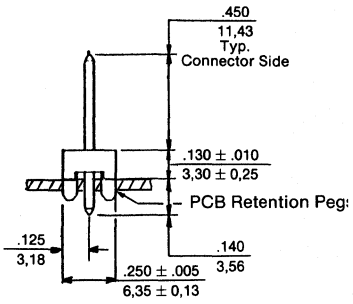
Mates with

2139	7664
2145	7674
3069	7675
6442	41695
7660	41815



Recommended PC Board Hole Layout



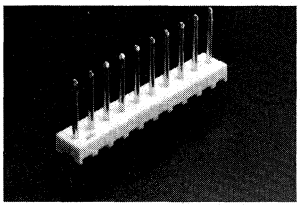


Ordering Information

	Order No.
Tin	26-64-0**XX**0
Gold	26-65-0**XX**0
Replace **XX** with number of circuits desired, 02-18	

NOTES:
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 61E for Dim. A and Dim. B
3. Two pegs for ckt. sizes 3-18. One peg for ckt. size 2.

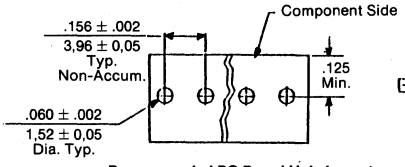
41741 Series
Straight Round Pin Header



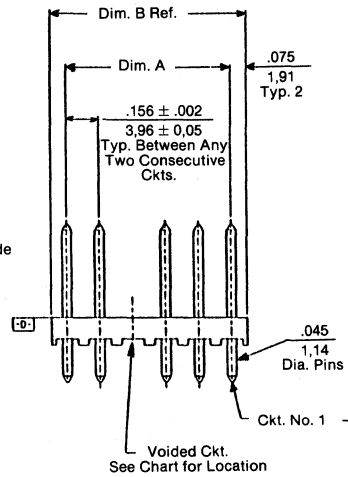
- Preferred over Molex 2402 (09-64-1XX1)
- .045" (1,14mm) square pins
- **Polyester 94V-0 material**
- 2-18 circuits

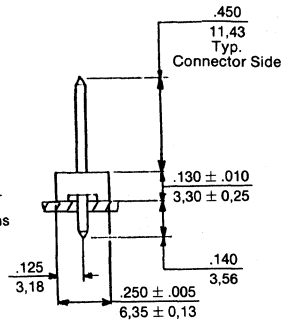
Mates with

2139	7664
2145	7674
3069	7675
6442	41695
7660	41815



Recommended PC Board Hole Layout





Ordering Information

	Order No.
Tin	• 26-60-0**XX**0
Gold	• 26-61-0**XX**0
Replace **XX** with number of circuits desired, 02-18	

• U.S. Standard Product, available through Molex franchised distributors.

NOTES:
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 61E for Dim. A and Dim. B

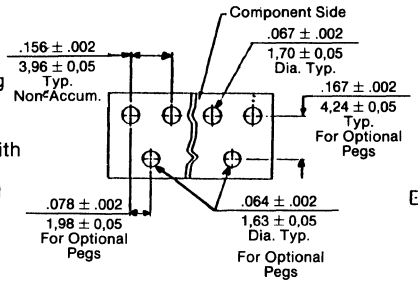
.156" (3,96 mm) Center Headers

42491 Series
Straight Square Pin Locking Header with Pegs

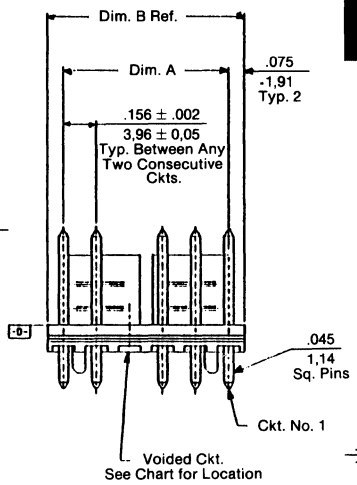
- Preferred over Molex 2630 and 2391 (09-74-1XX1 and 09-65-1XX1)
- .045" (1,14mm) square pins
- **Polyester 94V-0 material**
- 2-18 circuits
- Pegs provide retention to printed circuit board during handling and soldering
- Provides left to right polarization when mated with 41695 .156" crimp housing with the optional polarizing ribs

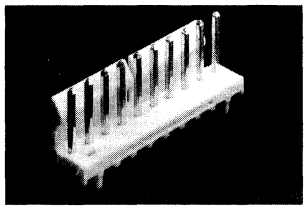
Mates with:

2139	7664
2145	7674
3069	7675
6442	41695
7660	41815

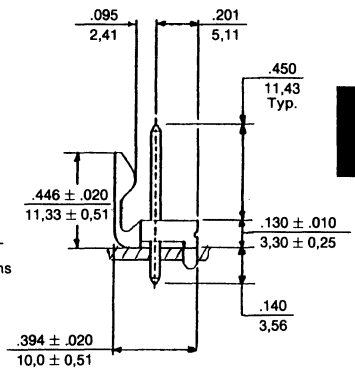


Recommended PC Board Hole Layout





With Molded Retention Pegs



E

Ordering Information

	Order No.
Tin	26-64-4**XX**0
Gold	26-65-4**XX**0
Replace **XX** with number of circuits desired, 02-18	

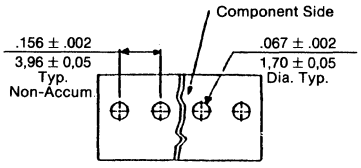
NOTES:
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 61E for Dim. A and Dim. B
3. Two pegs for ckt. sizes 3-18. One peg for ckt. size 2.

41791 Series
Straight Square Pin Locking Header

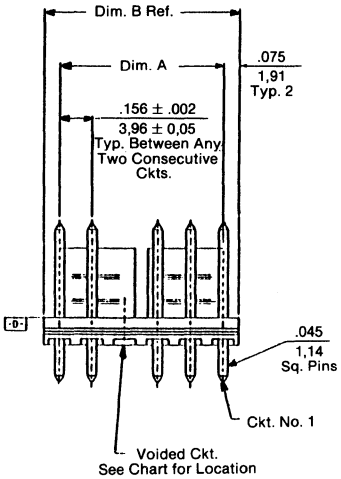
- Preferred over Molex 2630 and 2391 (09-74-1XX1 and 09-65-1XX1)
- .045" (1,14mm) square pins
- **Polyester 94V-0 material**
- 2-18 circuits
- Provides left to right polarization when mated with 41695 .156" crimp housing with the optional polarizing ribs

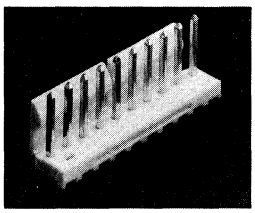
Mates with:

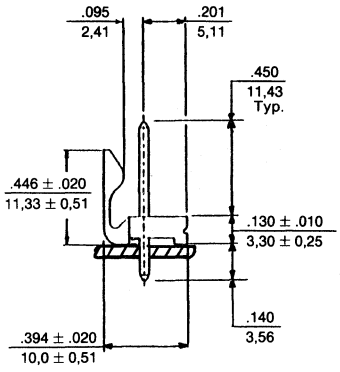
2139	7664
2145	7674
3069	7675
6442	41695
7660	41815



Recommended PC Board Hole Layout







Ordering Information

	Order No.
Tin	• 26-60-4**XX**0
Gold	• 26-61-4**XX**0
Replace **XX** with number of circuits desired, 02-18	

• U.S. Standard Product, available through Molex franchised distributors.

NOTES:
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 61E for Dim. A and Dim. B

.156" (3,96 mm) Center Headers

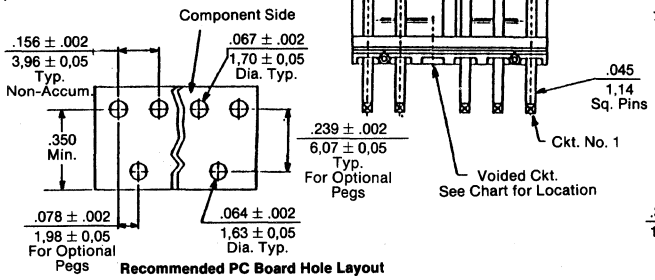
E

42492 Series
Right Angle Square Pin Header with Pegs

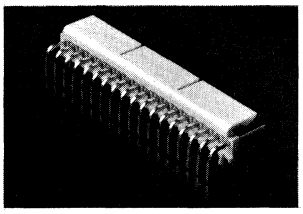
- Preferred over Molex 2420 (09-75-1XX8)
- .045" (1,14mm) square pins
- **Polyester 94V-0 material**
- 2-18 circuits
- Pegs provide retention to printed circuit board during handling and soldering
- Provides left to right polarization when mated with 41695 .156" crimp housing with the optional polarizing ribs

Mates with:

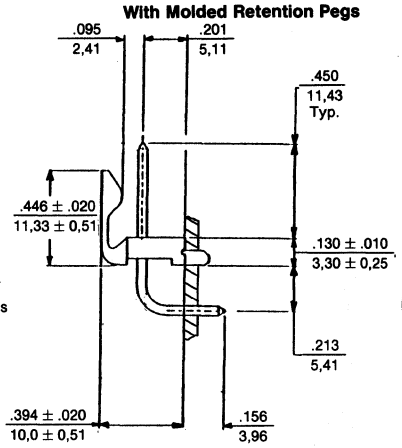
2139	7664
2145	7674
3069	7675
6442	41695
7660	41815



Recommended PC Board Hole Layout



With Molded Retention Pegs



Ordering Information

	Order No.
Tin	26-64-5**XX**0
Gold	26-65-5**XX**0
Replace **XX** with number of circuits desired, 02-18	

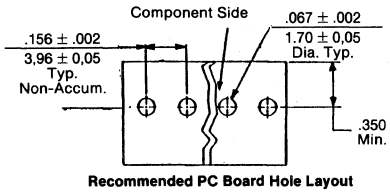
NOTES:
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 61E for Dim. A and Dim. B
3. Two pegs for ckt. sizes 3-18. One peg for ckt. size 2.

41792 Series
Right Angle Square Pin Header

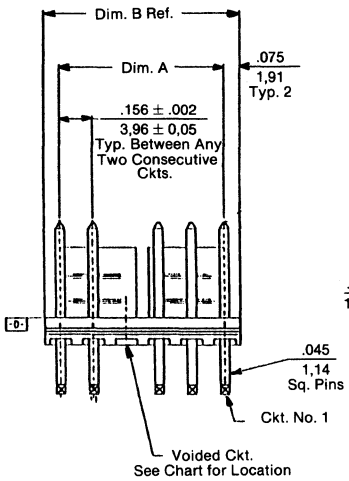
- Preferred over Molex 2420 (09-75-1XX8)
- .045" (1,14mm) square pins
- **Polyester 94V-0 material**
- 2-18 circuits
- Provides left to right polarization when mated with 41695 .156" crimp housing with the optional polarizing ribs

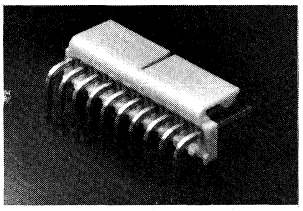
Mates with:

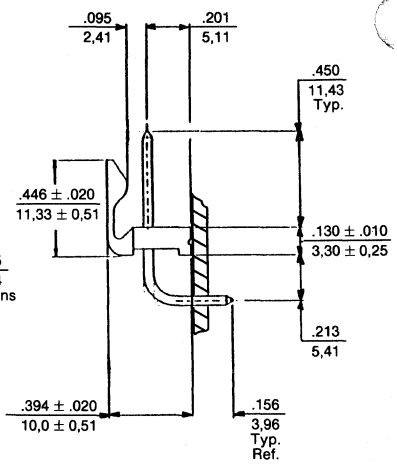
2139	7664
2145	7674
3069	7675
6442	41695
7660	41815



Recommended PC Board Hole Layout







Ordering Information

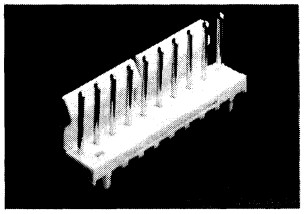
	Order No.
Tin	• 26-60-5**XX**0
Gold	• 26-61-5**XX**0
Replace **XX** with number of circuits desired, 02-18	

• U.S. Standard Product, available through Molex franchised distributors

NOTES:
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 61E for Dim. A and Dim. B

.156" (3,96 mm) Center Headers

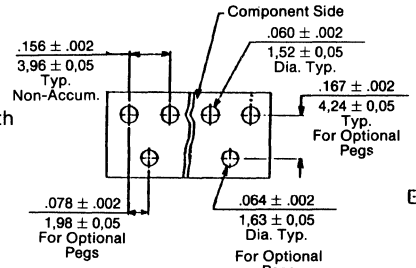
42461 Series
Straight Round Pin Locking Header with Pegs



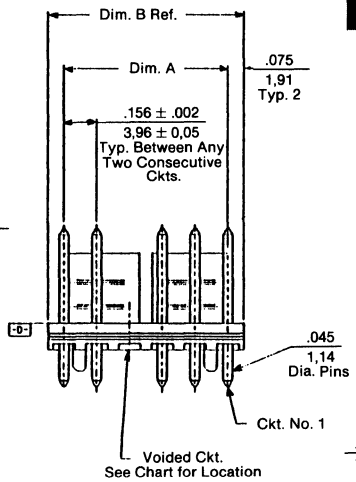
- Preferred over Molex 2391 (09-65-1XX1)
- .045" (1,14mm) diameter round pins
- **Polyester 94V-0 material**
- 2-18 circuits
- Pegs provide retention to printed circuit board during handling and soldering
- Provides left to right polarization when mated with 41695 .156" crimp housing with the optional polarizing ribs

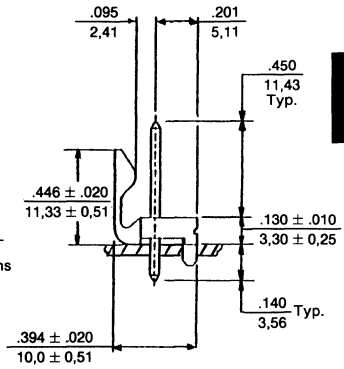
Mates with:

2139	7664
2145	7674
3069	7675
6442	41695
7660	41815



Recommended PC Board Hole Layout



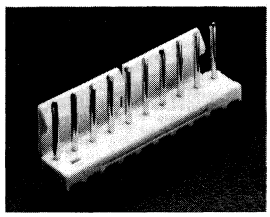


Ordering Information

	Order No.
Tin	26-64-1**XX**0
Gold	26-65-1**XX**0
Replace **XX** with number of circuits desired, 02-18	

NOTES:
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 61E for Dim. A and Dim. B
3. Two pegs for ckt. sizes 3-18. One peg for ckt. size 2.

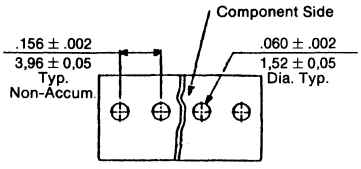
41761 Series
Straight Round Pin Locking Header



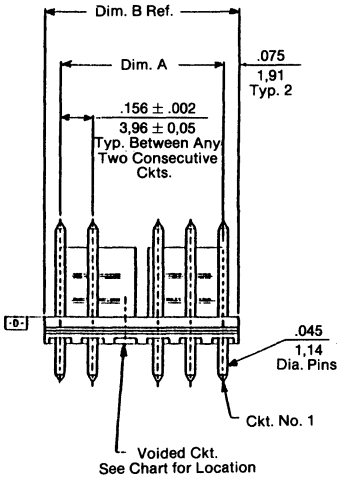
- Preferred over Molex 2391 (09-65-1XX1)
- .045" (1,14mm) diameter round pins
- **Polyester 94V-0 material**
- 2-18 circuits
- Provides left to right polarization when mated with 41695 .156" crimp housing with the optional polarizing ribs

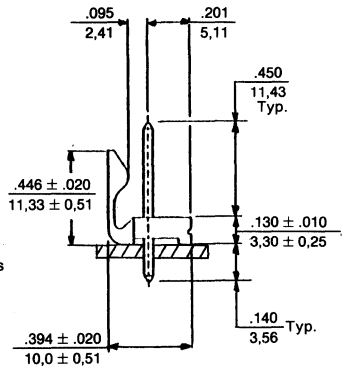
Mates with:

2139	7664
2145	7674
3069	7675
6442	41695
7660	41815



Recommended PC Board Hole Layout





Ordering Information

	Order No.
Tin	• 26-60-1**XX**0
Gold	• 26-61-1**XX**0
Replace **XX** with number of circuits desired, 02-18	

• U.S. Standard Product, available through Molex franchised distributors.

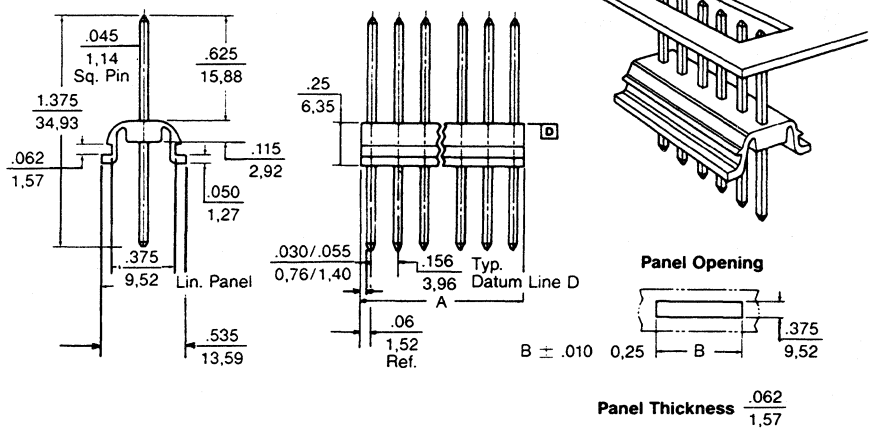
NOTES:
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 61E for Dim. A and Dim. B

.156" (3,96 mm) Center Headers

E

2220 Series
Chassis Mount Header

- 2-18 circuits
- Mounts in chassis .062" thick
- .045" (1,14mm) square brass pins
- 94V-2 nylon housing
- Mates with Molex .156" (3,96mm) centerline connectors



Dimensions

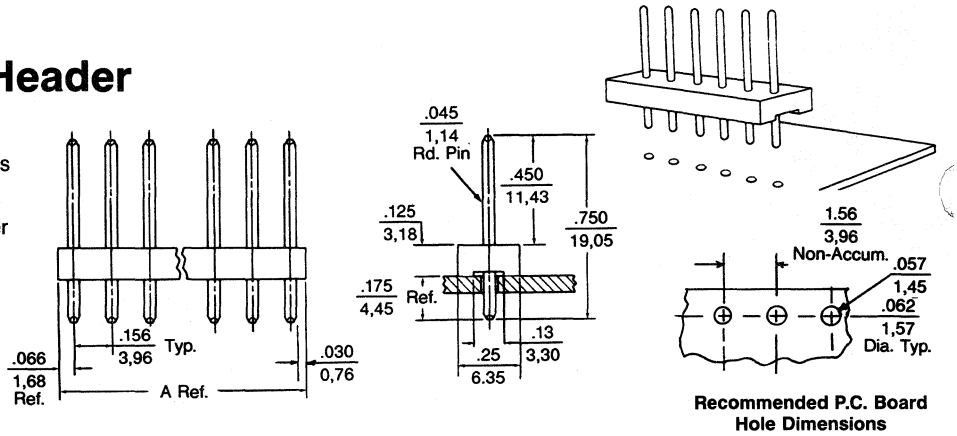
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.290 7,37	.302 7,67	6	.914 23,22	.926 23,52	10	1.538 39,07	1.550 39,37	13	2.006 50,95	2.108 53,54	16	2.474 62,84	2.486 63,14
3	.446 11,33	.458 11,63	7	1.070 27,18	1.082 27,48	11	1.694 43,03	1.706 43,33	14	2.162 54,91	2.174 55,22	17	2.630 66,80	2.642 67,11
4	.602 15,29	.614 15,60	8	1.226 31,14	1.238 31,45	12	1.850 46,99	1.862 47,29	15	2.318 58,88	2.330 59,18	18	2.786 70,76	2.798 71,07
5	.758 19,25	.770 19,56	9	1.382 35,10	1.394 35,41									

Ordering Information

Tin Order No. 09-57-1**XX**5
Gold Order No. 09-78-1**XX**1
Replace "**XX**" with number of circuits, 02-18

3192 Series
Round Pin Straight Header

- 2-18 circuits
- .045" (1,14mm) straight round brass pins
- 94V-2 nylon housing
- Mates with Molex .156" (3,96mm) center connectors
- Stackable end-to-end



Dimensions

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.288 7,32	5	.756 19,20	8	1.224 31,09	11	1.692 42,98	14	2.160 54,86	17	2.628 66,75
3	.444 11,28	6	.912 23,17	9	1.380 35,05	12	1.848 46,94	15	2.316 58,83	18	2.784 70,71
4	.600 15,24	7	1.068 27,13	10	1.536 39,01	13	2.004 50,90	16	2.472 62,79		

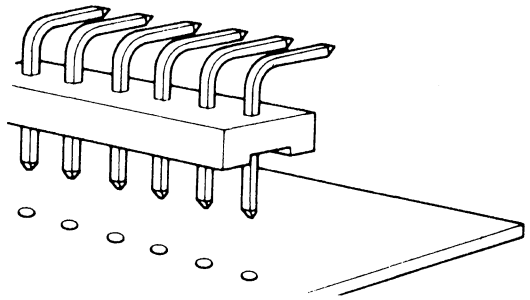
Ordering Information (Preferred version in Europe and Far East)

Tin Order No. 26-20-2**XX**1
Gold Order No. 26-23-2**XX**1
Replace "**XX**" with number of circuits, 02-18

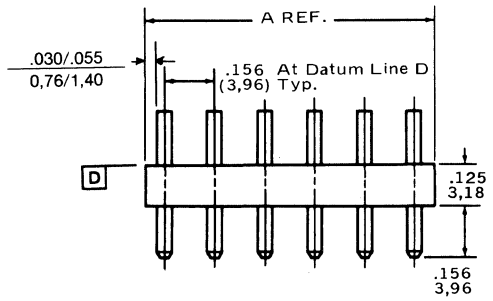
.156" (3,96 mm) Center Headers

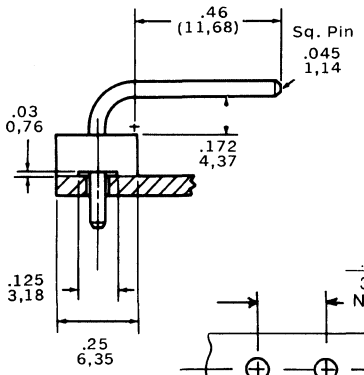
3246 Series
Square Pin
Right Angle Header

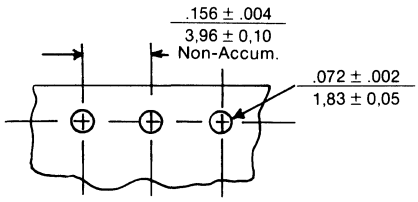
- 2-18 circuits
- .045" right angle square pins
- 94V-2 nylon insulator
- Mates with Molex .156" (3,96mm) center connectors



E







Recommended P.C. Board Hole Dimensions

inches
mm

Dimensions

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.288 7,32	5	.756 19,20	8	1.224 31,09	11	1.692 42,98	14	2.160 54,86	17	2.628 66,75
3	.444 11,28	6	.912 23,17	9	1.380 35,05	12	1.848 46,94	15	2.316 58,83	18	2.784 70,71
4	.600 15,24	7	1.068 27,13	10	1.536 39,01	13	2.004 50,90	16	2.472 62,70		

Ordering Information

(Preferred version in Europe and the Far East)

Tin Order No. 26-10-2XX1
Replace XX with number of circuits, 02-18

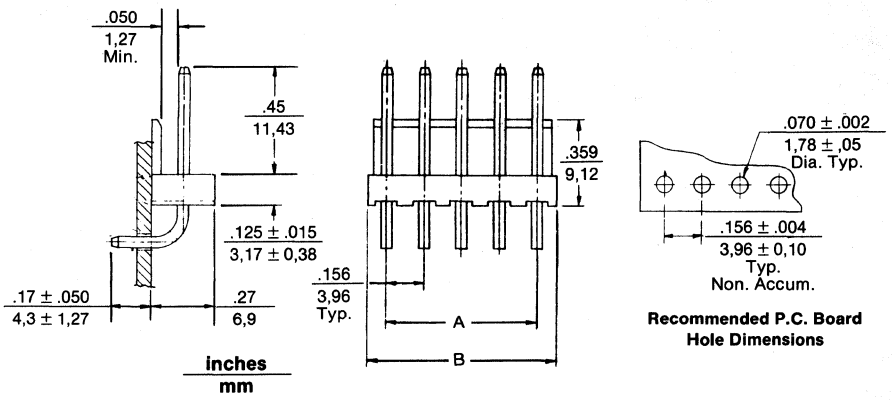
.156" (3,96 mm) Center Square Pin Polarizing Header

Preferred Version in Europe and the Far East

3243 Series

Square Pin Right Angle Polarizing Wall

- .045" (1,14mm) square pins, brass
- 94V-2 nylon housing
- .00030" (0,0076mm) tin over copper or .000020" min. (0,0005mm) gold over nickel



Recommended P.C. Board Hole Dimensions

Ordering Information

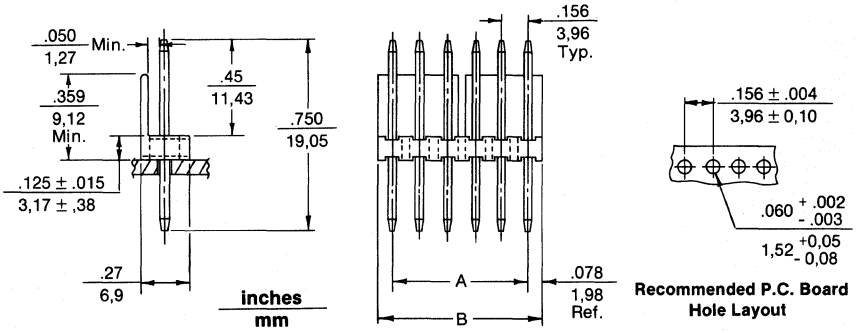
Circuits	Tin Order No.	Gold Order No.	Circuits	Tin Order No.	Gold Order No.	Circuits	Tin Order No.	Gold Order No.
2	26-17-1021	26-26-1021	8	26-17-1081	26-26-1081	13	26-17-1131	26-26-1131
3	26-17-1031	26-26-1031	9	26-17-1091	26-26-1091	14	26-17-1141	26-26-1141
4	26-17-1041	26-26-1041	10	26-17-1101	26-26-1101	15	26-17-1151	26-26-1151
5	26-17-1051	26-26-1051	11	26-17-1111	26-26-1111	16	26-17-1161	26-26-1161
6	26-17-1061	26-26-1061	12	26-17-1121	26-26-1121	17	26-17-1171	26-26-1171
7	26-17-1071	26-26-1071						

Preferred Version in Europe and the Far East

3190 Series

Straight Round Pin Polarizing Wall

- .045" (1,14mm) dia. round pins, brass
- Pre-tinned or gold plate, .000030" (0,0008) min. over .000060" (0,0015) min. nickel
- Pin pushout force: 3 lbs. min.



Recommended P.C. Board Hole Layout

Ordering Information

Pre-Tinned Brass Order No. 26-19-2XX1
Gold Order No. 26-22-2XX1
Replace XX with number of circuits, 02-18

Assemblies over 5 circuits have slot in polarizing wall

Dimensions 3243/3190

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.156 3,96	.312 7,92	7	.936 23,77	1.092 27,74	11	1.560 39,62	1.716 43,59	15	2.184 55,47	2.340 59,44
3	.312 7,92	.468 11,89	8	1.092 27,74	1.248 31,70	12	1.716 43,59	1.872 47,55	16	2.340 59,44	2.496 63,40
4	.468 11,89	.624 15,85	9	1.248 31,70	1.404 35,66	13	1.872 47,55	2.028 51,51	17	2.496 63,40	2.652 67,36
5	.624 15,85	.780 19,81	10	1.404 35,66	1.560 39,62	14	2.028 51,51	2.184 55,47	18	2.652 67,36	2.808 71,32
6	.780 19,81	.936 23,77									

.156" (3,96 mm) Headers

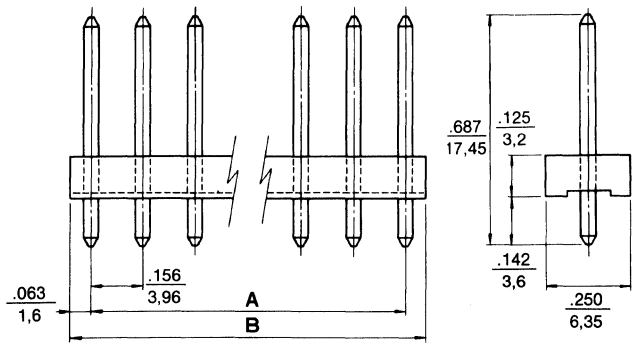
molex®

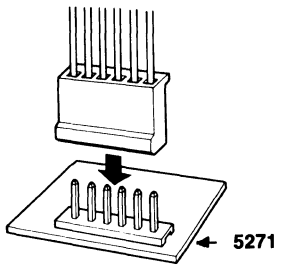
Available Primarily in the Far East

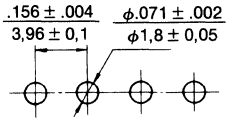
5271 Series
Straight Pin Header

- Mates with 5195 series housing
- 2-12 Circuits
- UL 94V-2 nylon 6/6
- .045" (1,14mm) straight square wire pin
- Tin plated brass pins. Plating options available

inches / mm







P.C. Board Hole Dimensions

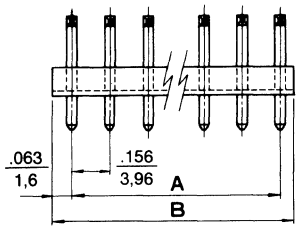
E

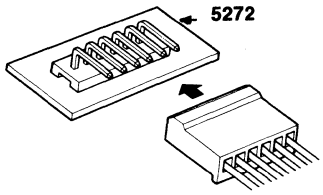
Ordering Information and Dimensions

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	09-67-4021	.156 (3,96)	.282 (7,16)	8	09-67-4081	1.092 (27,74)	1.22 (30,9)
3	09-67-4031	.312 (7,92)	.438 (11,13)	9	09-67-4091	1.248 (31,70)	1.37 (34,8)
4	09-67-4041	.468 (11,89)	.591 (15,0)	10	09-67-4101	1.404 (35,66)	1.53 (38,8)
5	09-67-4051	.624 (15,85)	.748 (19,0)	11	09-67-4111	1.560 (39,62)	1.69 (42,8)
6	09-67-4061	.780 (19,81)	.906 (23,0)	12	09-67-4121	1.716 (43,59)	1.84 (46,7)
7	09-67-4071	.936 (23,77)	1.06 (26,9)				

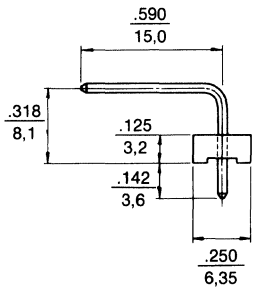
5272 Series
Right Angle Pin Header

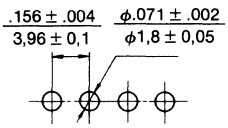
- Mates with 5195 series housing
- 2-12 Circuits
- UL 94V-2 nylon 6/6
- Rt. angle .045" (1,14mm) square wire pin
- Tin plated brass pins. Plating options available





inches / mm





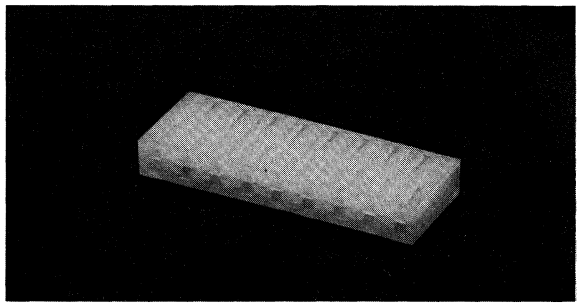
P.C. Board Hole Dimensions

Ordering Information and Dimensions

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	09-66-5022	.156 (3,96)	.282 (7,16)	8	09-66-5082	1.092 (27,74)	1.22 (30,9)
3	09-66-5032	.312 (7,92)	.438 (11,13)	9	09-66-5092	1.248 (31,70)	1.37 (34,8)
4	09-66-5042	.468 (11,89)	.591 (15,0)	10	09-66-5102	1.404 (35,66)	1.53 (38,8)
5	09-66-5052	.624 (15,85)	.748 (19,0)	11	09-66-5112	1.560 (39,62)	1.69 (42,8)
6	09-66-5062	.780 (19,81)	.906 (23,0)	12	09-66-5122	1.716 (43,59)	1.84 (46,7)
7	09-66-5072	.936 (23,77)	1.06 (26,9)				

.200" (5,08mm) Center Crimp Terminal Housing

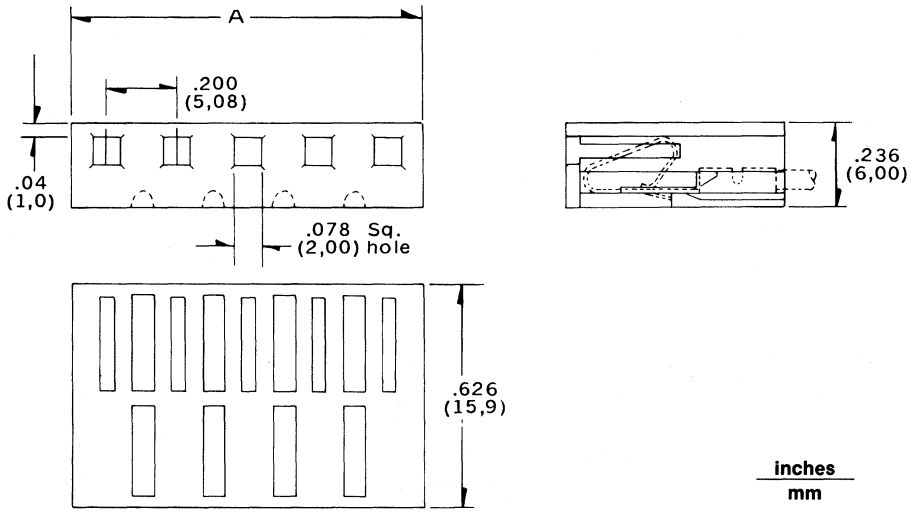
3001 Series



- Mates with .045" (1,14mm) round or square pins
- Accepts Molex double cantilever crimp terminals, see page 29E
- 94V-2 nylon standard, 94V-0 optional
- 1-20 circuits available
- Mates with Molex KK .200" (5,08mm) center headers or staked pins
- Available with polarizing peg on sidewall. Contact factory for 3001P
- Accommodates polarizing key 2560-1 and polarizing peg 2560-2

Mating headers:
3003 3061
3008

E



inches
mm

Dimensions

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
1	.200 5,08	5	1.000 25,40	9	1.800 45,72	12	2.400 60,96	15	3.00 76,20	18	3.600 91,44
2	.400 10,16	6	1.200 30,48	10	2.000 50,80	13	2.600 66,04	16	3.200 81,28	19	3.800 96,52
3	.600 15,24	7	1.400 35,56	11	2.200 55,88	14	2.800 71,12	17	3.400 86,36	20	4.000 101,60
4	.800 20,32	8	1.600 40,64								

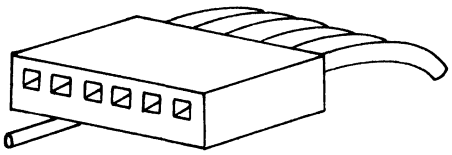
Ordering Information

Order No. 10-01-1XX4
Replace XX with number of circuits, 01-20

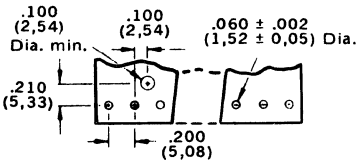
.200" (5,08 mm) Center Crimp Terminal Housing

3011 Series

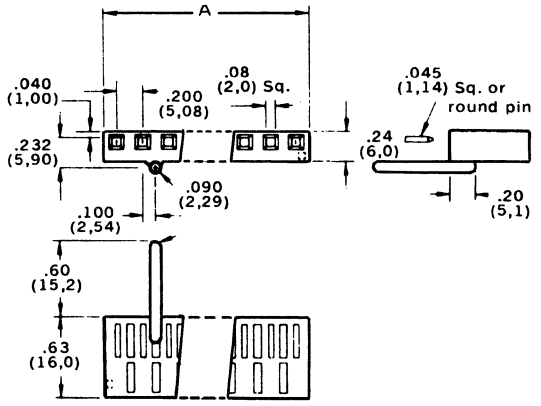
- Molded in polarizing peg on side of housing
- Accepts Molex crimp type terminals 2478 and 2578. Order separately, page 47E
- Mates with Molex series 3003 headers and .045" (1,14mm) staked pins
- 94V-2 nylon standard; 94V-1 or 94V-0 flame retardant material are optional
- Available with shorter polarizing peg. Contact factory for 3480



E



P.C. Board Hole Dimensions



Inches
mm

Dimensions

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.400 10,16	6	1.200 30,48	9	1.800 45,72	12	2.400 60,96	15	3.000 76,20	18	3.600 91,44
3	.600 15,24	7	1.400 35,56	10	2.000 50,80	13	2.600 66,04	16	3.200 81,28	19	3.800 96,52
4	.800 20,32	8	1.600 40,64	11	2.200 55,88	14	2.800 71,12	17	3.400 86,36	20	4.000 101,60
5	1.000 25,40										

Ordering Information

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2 (a)	• 10-13-1024	6 (b)	• 10-13-1064	10 (b)	• 10-13-1106	14 (b)	10-13-1144	18 (b)	10-13-1184
3 (b)	• 10-13-1034	7 (b)	10-13-1075	11 (b)	• 10-13-1114	15 (b)	10-13-1154	19 (b)	10-13-1194
4 (b)	• 10-13-1044	8 (b)	10-13-1085	12 (b)	• 10-13-1125	16 (b)	10-13-1164	20 (b)	10-13-1204
5 (b)	• 10-13-1055	9 (b)	• 10-13-1094	13 (b)	• 10-13-1134	17 (b)	10-13-1174		

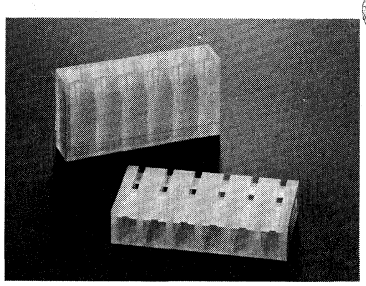
Polarizing peg between circuits:
(a) 1 and 2 (b) 2 and 3

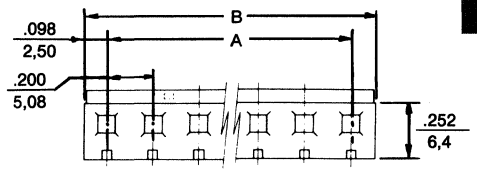
• U.S. Standard Product, available through Molex franchised distributors.

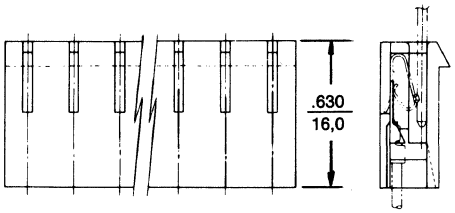
.200" (5,08 mm) Center Connector

5058-N Housing

- 94V-2 nylon, 6/6
- Mates with 5282-NA or .045" (1,14mm) staked pins
- For use with Molex terminals 5167, 5168, 2478G, GL and 2758G, GL
- Locking ramp
- Accommodates polarizing key 2560-1 and polarizing peg 2560-2







Dimensions

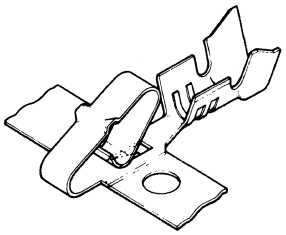
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.200 5,08	.397 10,08	4	.600 15,24	.797 20,24	6	1.000 25,4	1.197 30,40	8	1.400 35,56	1.597 40,56
3	.400 10,16	.597 15,16	5	.800 20,32	.997 25,32	7	1.200 30,48	1.397 35,48	9	1.600 40,64	1.797 45,64

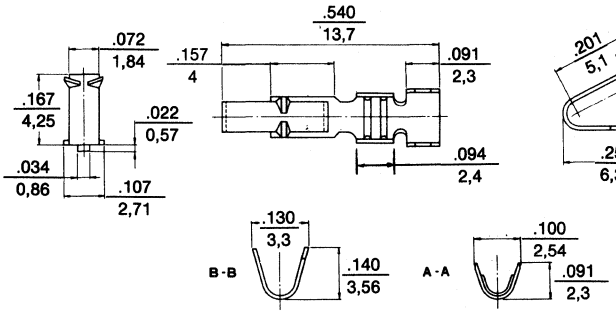
Ordering Information (Preferred version in the Far East)

Order No. 10-01-5XX2
Replace **XX** with number of circuits, 02-09

5167/5168 Cat Ear Terminals

- For use with 5058-N housing





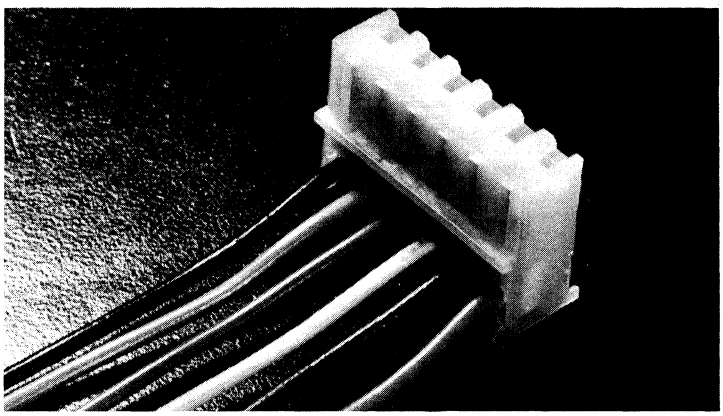
Ordering Information and Dimensions 5167/5168 (Preferred version in the Far East)

Order No.	Eng. No.	Wire Accommodations	Insulation Outside Dia.	Form	Material	Automatic Tooling		Hand Tool
						Press	Crimp Die	
08-70-0012	5167	AWG #18-#24	2,5mm Max.	Chain	Pre-Plated Tin	M15A	JM5868A	JHTR2445A
08-70-0013	5167			Loose				
08-70-0018	5168	AWG #22-#28	1,7mm Max.	Chain				
08-70-0019	5168			Loose				

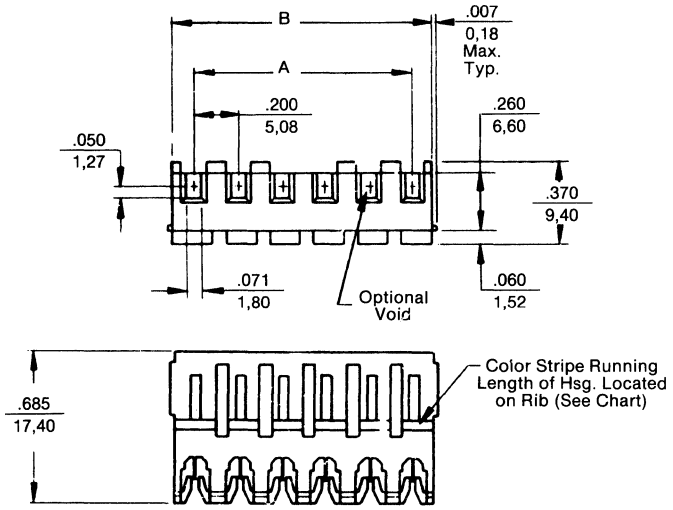
.200" (5,08 mm) Center Insulation Displacement Connector

6952 Series
3 Point Trifurcon Contact

- 2-16 Circuits
- Without locking ramp
- Feed-to version
- Molded-in strain reliefs
- Accepts wire O.D. from .045" (1,14mm) to .095" (2,41mm) max.
- Mates with standard .200" (5,06mm) center headers
- Also accepts crimp terminals 6838, 76258
- UL recognized (File #E29179)



E



Dimensional Information

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.200 ± .006 5,08 ± 0,15	.392 ± .006 9,95 ± 0,15	6	1.000 ± .008 25,40 ± 0,20	1.192 ± .008 30,27 ± 0,20	10	1.800 ± .010 45,72 ± 0,25	1.992 ± .010 50,59 ± 0,25	14	2.600 ± .012 66,04 ± 0,30	2.792 ± .012 70,91 ± 0,30
3	.400 ± .006 10,16 ± 0,15	.592 ± .007 15,03 ± 0,18	7	1.200 ± .008 30,48 ± 0,20	1.392 ± .007 35,35 ± 0,20	11	2.000 ± .011 50,80 ± 0,28	2.192 ± .011 55,67 ± 0,28	15	2.800 ± .013 71,12 ± 0,33	2.992 ± .013 75,99 ± 0,33
4	.600 ± .007 15,24 ± 0,18	.792 ± .007 20,11 ± 0,18	8	1.400 ± .010 35,56 ± 0,25	1.592 ± .010 40,43 ± 0,25	12	2.200 ± .011 55,88 ± 0,28	2.392 ± .011 60,75 ± 0,28	16	3.000 ± .013 76,20 ± 0,35	3.192 ± .014 81,07 ± 0,35
5	.0800 ± .007 20,32 ± 0,18	.992 ± .007 25,19 ± 0,18	9	1.600 ± .010 40,64 ± 0,25	1.792 ± .010 45,51 ± 0,25	13	2.400 ± .011 60,96 ± 0,28	2.592 ± .012 65,83 ± 0,30			

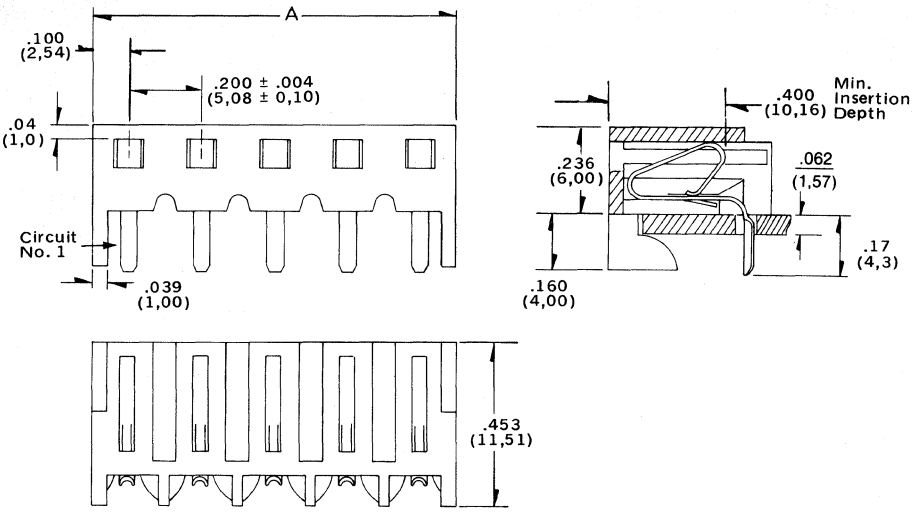
Ordering Information

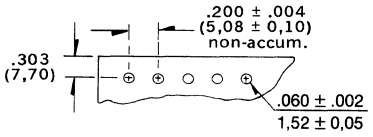
Ordering Suffix No.	Color	Type of Wire Terminated [All wires have a maximum Insulation Diameter of .095" (2,41mm)]
10-77-4**XX**3	Green	#26 and #27 GA Stranded, Fused Stranded and Solid Wire or #24 GA Stranded Wire.
Replace **XX** in Order No. with number of circuits required, 02-16		

.200" (5,08 mm) Center P.C. Board Connectors

3002-A Series
Right Angle Mount Style A

- 2-20 Circuits
- Right angle mount
- 94V-2 nylon housing
- Mates with Molex .200" (5,08mm) center headers 3003, 3008, 2599
- Terminal plating: .000040" tin/lead / .000080" copper min. (1,0 microns tin/lead / 2,0 microns copper min.) or .000020" gold / .000030" nickel min. (0,5 microns gold/0,75 microns nickel min.





P.C. Board Hole Dimensions

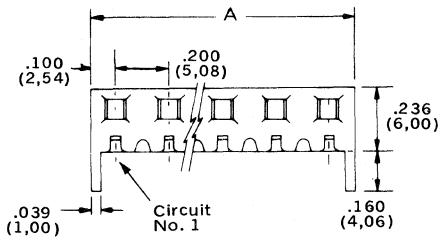
Ordering Information

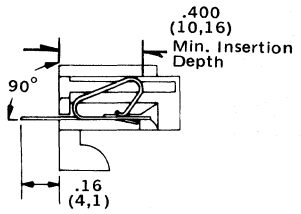
Tin Order No. 10-10-1**XX**1
Gold Order No. 10-10-1**XX**4
Replace **XX** with number of circuits, 02-20

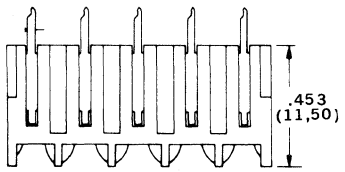
inches
mm

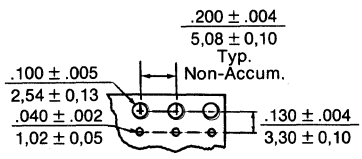
3002-B Series
Bottom Entry Connectors Style B

- 2-20 Circuits
- Bottom entry connectors
- 94V-2 nylon housing
- Mates with Molex .200" (5,08mm) headers, 3003, 3008 and 259
- Same plating as "A" version









Ordering Information

Order No. 10-02-1**XX**2
Replace **XX** with number of circuits, 02-20

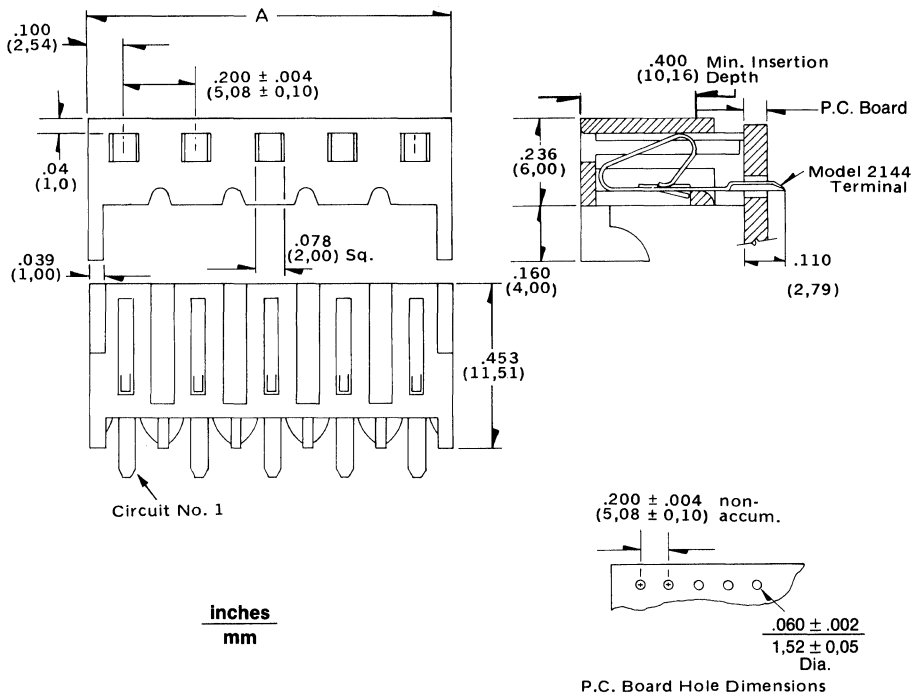
Dimensional Information 3002-A/3002-B Use Table on Next Page

.200" (5,08 mm) Center P.C. Board Connectors

3002-C Series

Top Entry Connectors Style C

- 2-20 Circuits
- Top entry mount
- 94V-2 nylon housing
- Mates with Molex .200" (5,08mm) center headers 3003, 3008 and 2599
- Same plating as "A & B" versions



inches
mm

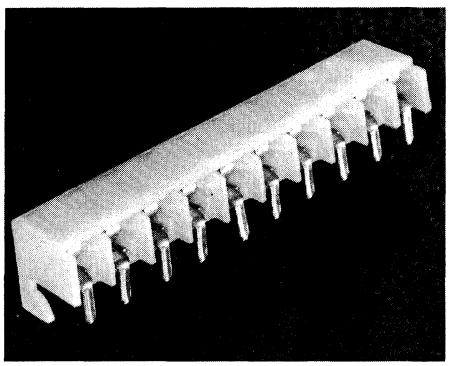
P.C. Board Hole Dimensions

Ordering Information

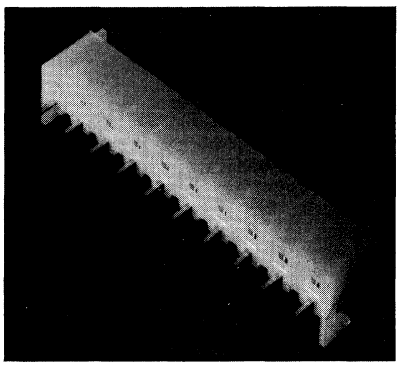
Tin Order No. 10-10-1**XX**3
Gold Order No. 10-10-1**XX**8
Replace **XX** with number of circuits, 02-20

Dimensions 3002-A-B-C Versions

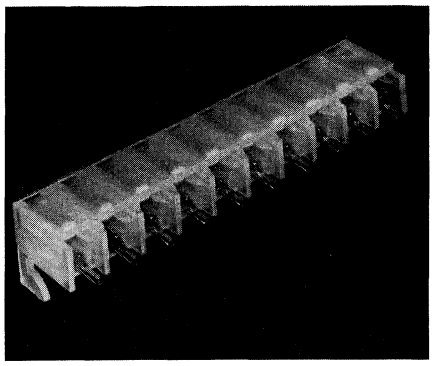
Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.400 10,16	6	1.200 30,48	9	1.800 45,72	12	2.400 60,96	15	3.000 76,20	18	3.600 91,44
3	.600 15,24	7	1.400 35,56	10	2.000 50,80	13	2.600 66,04	16	3.200 81,28	19	3.800 96,52
4	.800 20,32	8	1.600 40,64	11	2.200 55,88	14	2.800 71,12	17	3.400 86,36	20	4.000 101,60
5	1.000 25,40										



A



B

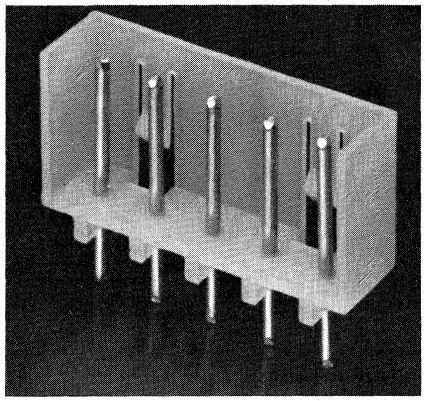


C

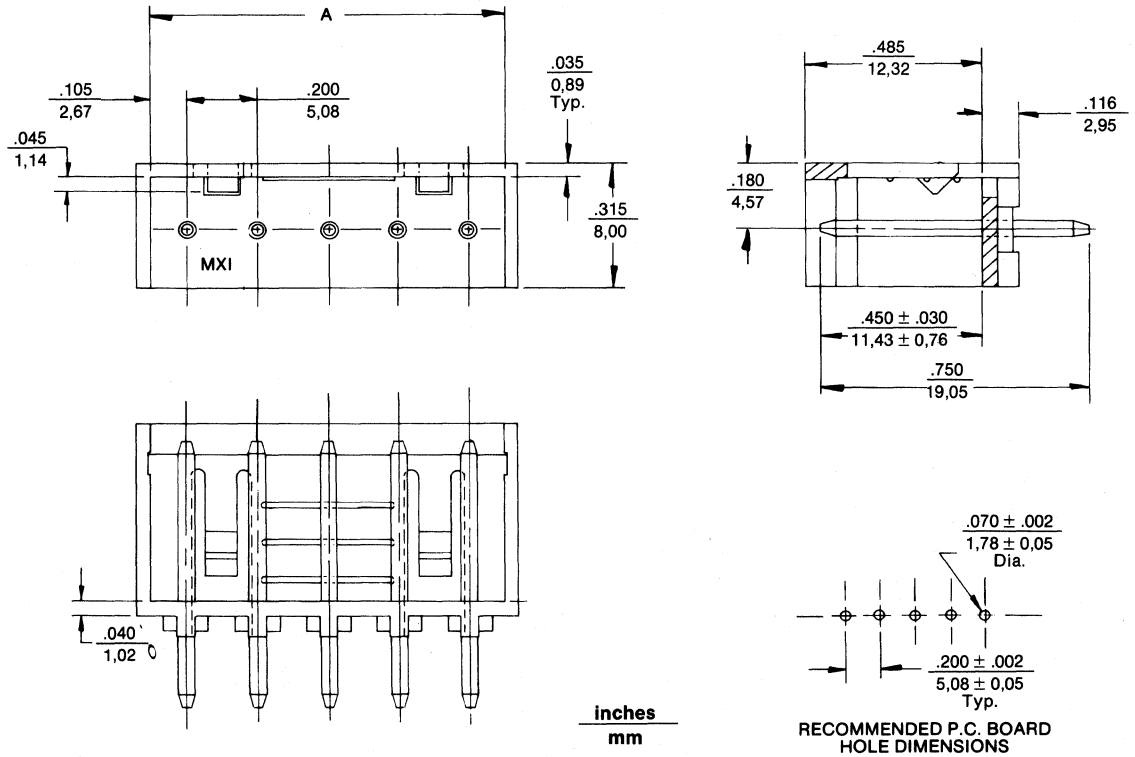
.200" (5,08 mm) Center Shrouded Header

8023 Series
Round Wire Shrouded Header with Housing

- 3, 4, 5, 6, 7 and 16 circuits with various void options
- .030" (0,76mm) Round wire
- Nylon 94V-2
- Mates with Molex .200" (5,08 mm) center I.D.T. connectors
- Also mates with crimp connector 3001



E



Dimensions

Circuits	Dim. A	Void Pin	Circuits	Dim. A	Void Pin	Circuits	Dim. A	Void Pin	Circuits	Dim. A	Void Pin
3	.610 15,49	None	5	1.010 25,65	2	6	1.210 30,73	5	7	1.410 35,81	None
4	.810 20,57	None	5	1.010 25,65	4	6	1.210 30,73	2	16	3.210 81,53	None
5	1.010 25,65	None	6	1.210 30,73	None						

Ordering Information

Circuits	Order No.	Void Pin	Circuits	Order No.	Void Pin	Circuits	Order No.	Void Pin	Circuits	Order No.	Void Pin
3	10-07-1033	None	5	10-07-1055	2	6	10-07-1064	5	7	10-07-1073	None
4	10-07-1043	None	5	10-07-1056	4	6	10-07-1065	2	16	10-07-1163	None
5	10-07-1053	None	6	10-07-1063	None						

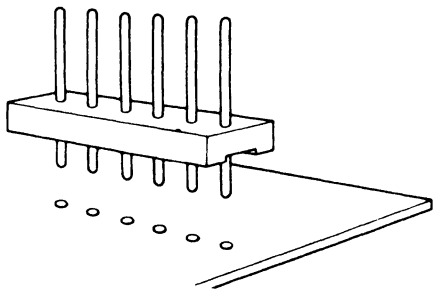
.200" (5,08 mm) Center Headers

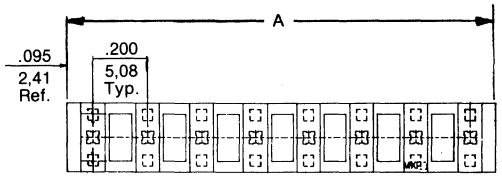
3003 Series
Round Pin Straight Header

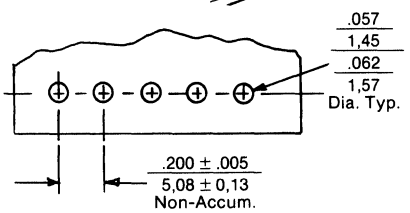
- 2-15 circuits
- .045" straight round wire pins
- 94V-2 nylon, V-1 or V-0 available
- Mates with Molex .200" (5,08mm) center connectors
- Available with voids–contact factory
- Molded insulator

Mating connectors

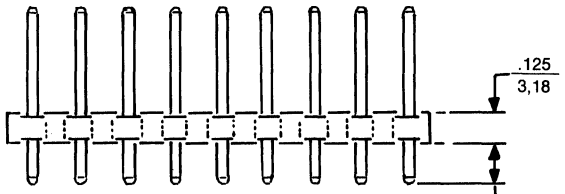
3001	5058-N
3007	3002
3011	

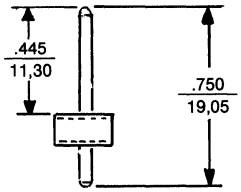






Recommended P.C. Board Hole Dimensions





inches
mm

Pin Pushout Force 3 lbs. (1,36 kg) minimum.

Dimensions

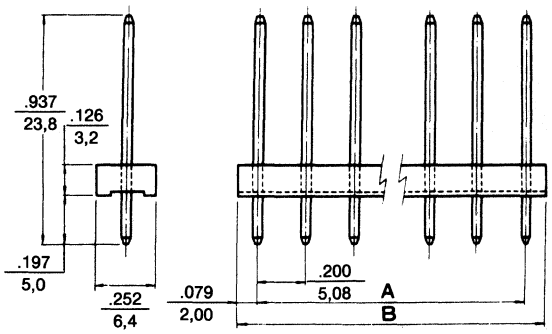
Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.390 9,91	4	.790 20,07	6	1.190 30,23	8	1.590 40,39	10	1.990 50,55	12	2.390 60,71	14	2.790 70,87	15	2.990 75,95
3	.590 14,99	5	.990 25,15	7	1.390 35,31	9	1.790 45,47	11	2.190 55,63	13	2.590 65,79				

Ordering Information

Tin Order No. 10-08-1**XX**1
Gold Order No. 10-45-1**XX**1
Replace **XX** with number of circuits, 02-15

5077-NC
Square Pin Straight Header

- Mates with 2767-NBH



Ordering Information
(Preferred version in the Far East)

Circuits	Order No.	Circuits	Order No.
3	10-02-4034	5	10-02-4054
4	10-02-4044	6	10-02-4064

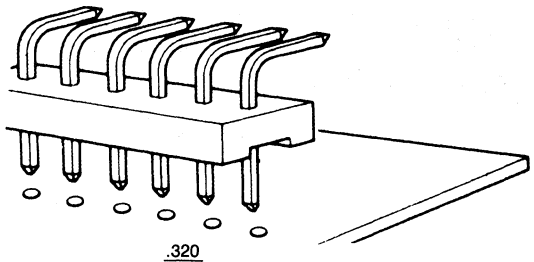
Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
3	.400 ± .006 10,16 ± 0,15	.557 14,16	5	.800 ± .010 20,32 ± 0,25	.957 24,32
4	.600 ± .008 15,24 ± 0,15	.757 19,24	6	1.000 ± .010 25,4 ± 0,25	1.157 29,40

.200" (5,08 mm) Center Headers

3061/2673 Series
Square Pin
Right Angle Headers

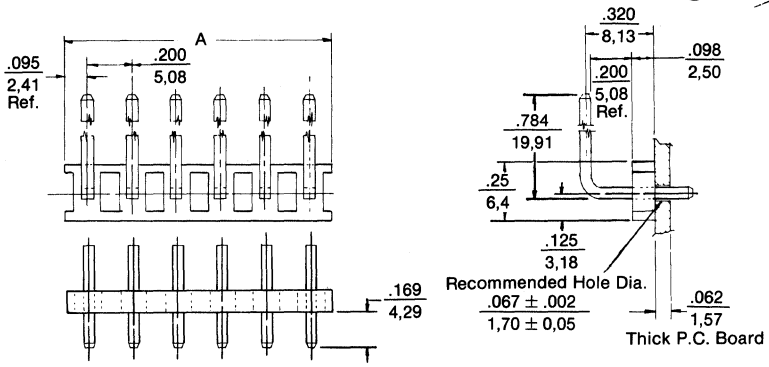
- 2-15 circuits
- .045" square pins
- 94V-2 nylon housing
- Pin material – brass
- Mates with Molex 3001



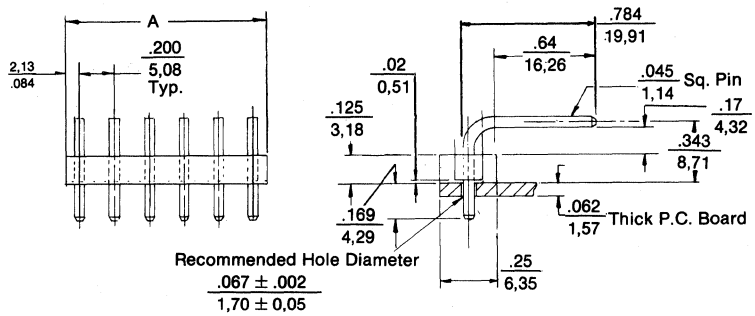
E

3061

inches
mm



2673



Dimensions 3061

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.390 9,91	5	.990 25,15	8	1.590 40,39	10	1.990 50,55	12	2.390 60,71	14	2.790 70,89
3	.590 14,99	6	1.190 30,23	9	1.790 45,47	11	2.190 2.190	13	2.590 65,79	15	2.990 2.990
4	.790 20,07	7	1.390 35,31								

Ordering Information 3061 (Preferred version in Europe)

Circuits	Tin	Gold	Circuits	Tin	Gold	Circuits	Tin	Gold	Circuits	Tin	Gold
2	10-06-1025	38-00-2012	6	10-06-1065	38-00-2016	10	10-06-1105	38-00-2020	13	10-06-1135	38-00-2023
3	10-06-1035	38-00-2013	7	10-06-1075	38-00-2017	11	10-06-1115	38-00-2021	14	10-06-1145	38-00-2024
4	10-06-1045	38-00-2014	8	10-06-1085	38-00-2018	12	10-06-1125	38-00-2022	15	10-06-1155	38-00-2025
5	10-06-1055	38-00-2015	9	10-06-1095	38-00-2019						

Dimensions 2673

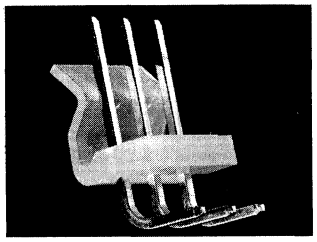
Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.368 9,35	5	.968 24,59	8	1.568 39,83	10	1.968 49,99	12	2.368 60,15	14	2.768 70,31
3	.568 14,43	6	1.168 29,67	9	1.788 44,91	11	2.168 55,07	13	2.568 65,23	15	2.968 75,39
4	.768 19,51	7	1.368 34,75								

Ordering Information 2673 (Preferred version in the Americas)

Order No. 10-06-1**XX**1
Replace **XX** with number of circuits, 02-15

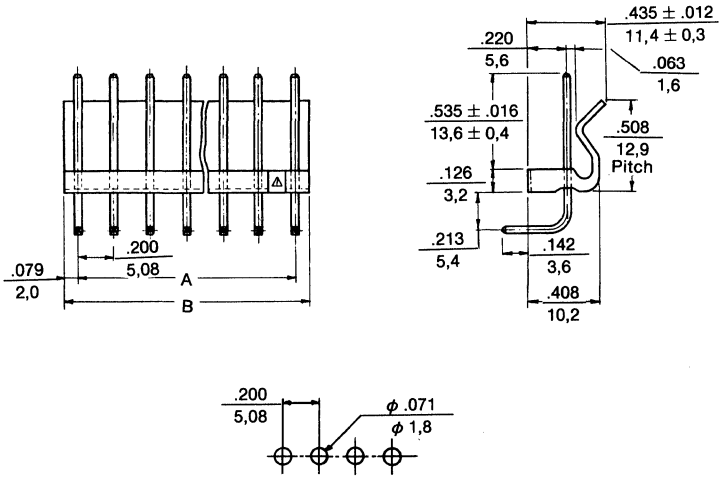
.200" (5,08 mm) Center Headers

5282-NA
Square Pin
Right Angle Header



- 2-7 circuits
- Mates with 5058-N housing using 5167/5168, 2478 or 2578 terminals

E



Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.200 5,08	.357 9,08	4	.600 15,24	.757 19,24	6	1.000 25,4	1.157 29,4
3	.400 10,16	.557 14,16	5	.800 20,32	.957 24,32	7	1.200 30,48	1.357 34,48

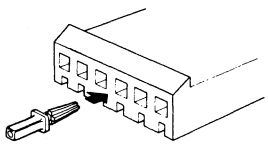
Ordering Information (Preferred version in the Far East)

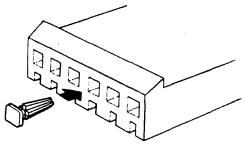
Order No. 10-33-1**XX**2
Replace **XX** with number of circuits, 02-07

Polarizing Keys and Pegs
Crimp Housings

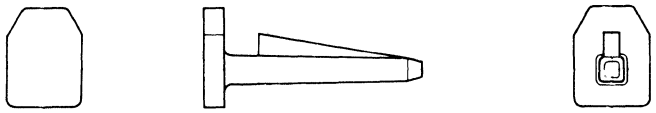
.098" (2,50 mm)
.100" (2,54 mm)

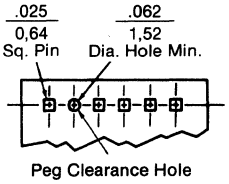
- Snap fit into KK Series housings
- Polarizing peg or key
- 94V-2 nylon material



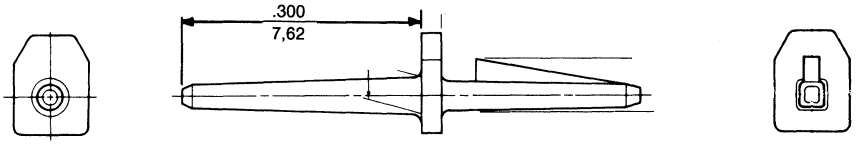


Polarizing Key





Polarizing Peg



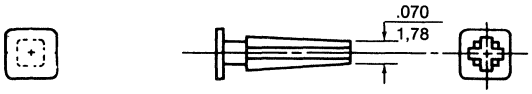
Ordering Information

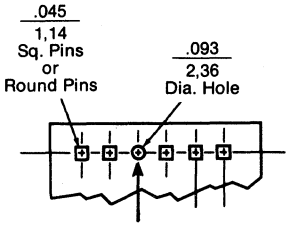
	Eng. No.	Order No.	Fits Connector Housings
Polarizing Key	4161-1	• 15-04-9209	2695, 4025, 4455, 5051, 6471
Polarizing Peg	4161-2	• 15-04-9210	

.200" (5,08 mm)
.156" (3,96 mm)

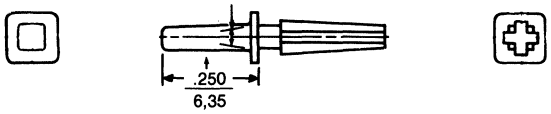
inches
mm

Polarizing Key





Polarizing Peg



Ordering Information

	Eng. No.	Order No.	Fits Connector Housings
Polarizing Key	2560-1	• 15-04-0219	2139, 2145
Polarizing Peg	2560-2	• 15-04-0220	
Polarizing Key	7580-1	89-00-3001	6442
Polarizing Peg	7580-2	89-00-3002	6442
Polarizing Key	42324-A	• 15-04-0297	41695, 41815

• U.S. Standard Product, available through Molex franchised distributors.

.098" and .100" Center (2,5 mm and 2,54 mm) Covers

7841 Series
Feed Thru and Feed To Standard Version

7840 Series
Feed Thru and Feed To Harness Board Versions

7841
Feed Thru
Standard Version

7840
Feed Thru Harness
Board Version

7841
Feed To
Standard Version

7840
Feed To Harness
Board Version

inches
mm

E

Dimensions .098" (2,5 mm)

Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length
4	.413 10,49	9	.906 23,01	13	1.299 32,99	17	1.693 43,00	21	2.067 53,00	25	2.480 62,99
5	.512 13,00	10	1.004 25,50	14	1.398 35,50	18	1.791 45,49	22	2.185 55,49	26	2.579 65,50
6	.611 15,51	11	1.102 27,99	15	1.496 37,99	19	1.890 48,00	23	2.283 57,98	27	2.678 68,02
7	.709 18,00	12	1.201 30,50	16	1.595 40,51	20	1.988 50,49	24	2.382 60,50	28	2.776 70,51
8	.807 20,49										

Ordering Information .098" (2,5 mm)

	7841 STANDARD COVER	7840 HARNESS BOARD COVER
Feed Thru	15-05-8**XX**6	15-05-8**XX**2
Feed To	15-05-8**XX**8	15-05-8**XX**4
Replace **XX** with number of circuits required, 04-28		

Dimensions .100" (2,54 mm)

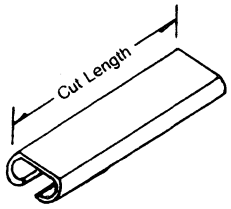
Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length
4	.414 10,51	9	.914 23,21	13	1.314 33,37	17	1.714 43,53	21	2.014 53,69	25	2.514 63,85
5	.514 13,05	10	1.014 25,75	14	1.414 35,91	18	1.814 46,07	22	2.214 56,23	26	2.614 66,39
6	.614 15,59	11	1.114 28,29	15	1.514 38,45	19	1.914 48,61	23	2.314 58,77	27	2.714 68,93
7	.714 18,13	12	1.214 30,83	16	1.614 40,99	20	2.014 51,15	24	2.414 61,31	28	2.814 71,47
8	.814 20,67										

Ordering Information .100" (2,54 mm)

	7841 STANDARD COVER	7840 HARNESS BOARD COVER
Feed Thru	15-05-8**XX**5	15-05-8**XX**1
Feed To	15-05-8**XX**7	15-05-8**XX**3
Replace **XX** with number of circuits required, 04-28		

.156", and .200" (3,96 mm, and 5,08 mm) Covers

7894 Series
Feed Thru Standard Connector Version



7894 NA

E

Dimensions .156" (3,96mm)

Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length
4	.598 15,19	8	1.222 31,04	12	1.846 46,89	16	2.470 62,74	19	2.938 74,62	22	3.406 86,51
5	.754 19,15	9	1.378 35,00	13	2.002 50,85	17	2.626 66,70	20	3.094 78,59	23	3.562 90,47
6	.910 23,11	10	1.534 38,96	14	2.158 54,81	18	2.782 70,66	21	3.250 82,55	24	3.718 94,44
7	1.066 27,07	11	1.690 42,93	15	2.314 58,78						

Ordering Information .156" (3,96mm)

Standard
7894 Feed Thru
15-05-7**XX**4
Replace "**XX**" with number of circuits, 04-24

Dimensions .200" (5,08mm)

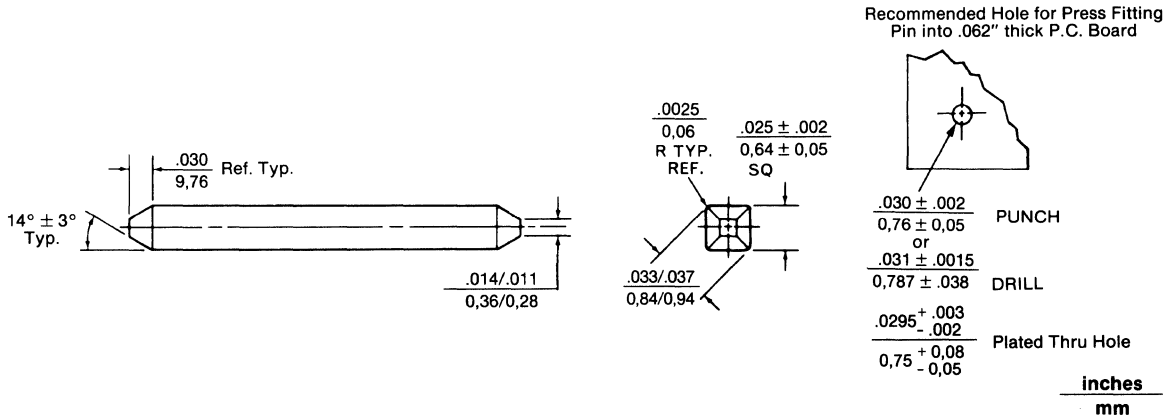
Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length
4	.730 18,54	7	1.330 33,78	9	1.730 43,94	11	2.130 54,10	13	2.530 64,26	15	2.930 74,41
5	.930 23,62	8	1.530 38,86	10	1.930 49,02	12	2.330 59,18	14	2.730 69,34	16	3.130 79,50
6	1.130 28,70										

Ordering Information .200" (5,08mm)

Standard
7894 Feed Thru
15-05-7**XX**5
Replace "**XX**" with number of circuits, 04-16

.025" (0,64 mm) and .045" (1,14 mm) Square Pins

.025" (0,64 mm) Square Pins



E

2766 Series
Hard Drawn Brass

Ordering Information 2766

Length	Plating	Order No.	Length	Plating	Order No.
.560"	Tin	• 89-00-0051	.437"	Tin	89-00-0068
.560"	Gold	• 89-00-0060	.437"	Gold	89-00-0114

• U.S. Standard Product, available through Molex franchised distributors.

4166 Series
Phosphor Bronze

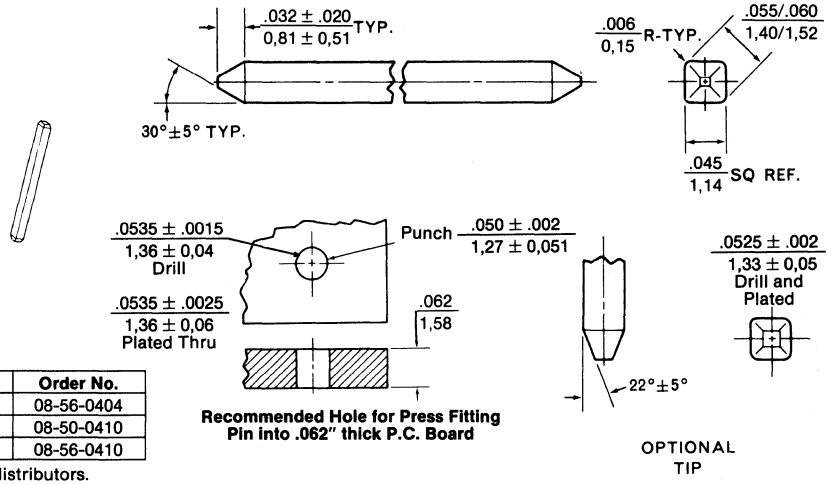
Ordering Information 4166

Length	Plating	Order No.	Length	Plating	Order No.
.560"	Tin	08-52-1201	.405"	Tin	08-52-0602
.560"	Gold	08-58-0611	.405"	Gold	08-58-0622

Contact factory for other plating options

.045" (1,14 mm) Square Pins

2161 Series
Hard Drawn Brass



Ordering Information 2161

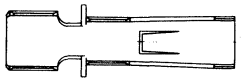
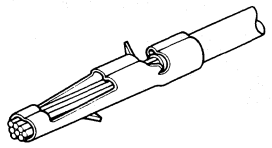
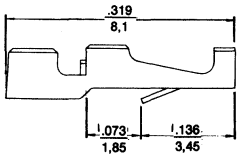
Length	Plating	Order No.	Length	Plating	Order No.
.750"	Tin	• 08-50-0401	.500"	Gold	08-56-0404
.750"	Gold	• 08-56-0401	.437"	Tin	08-50-0410
.500"	Tin	08-50-0404	.437"	Gold	08-56-0410

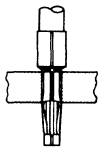
• U.S. Standard Product, available through Molex franchised distributors.

Stand Alone Board-In Crimp Terminals

5190 Series
P.C. Board Crimp Terminal

- Secures wire to P.C. board before wave soldering
- Rapid and economical means of hand wiring P.C. boards
- Wire solders directly to P.C. board
- No additional contact resistance
- Low profile
- Recommended P.C. board hole diameter .048 ± .003 (1,2 ± 0,08) for .062" (1,57mm) thick P.C. board



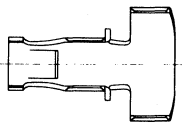
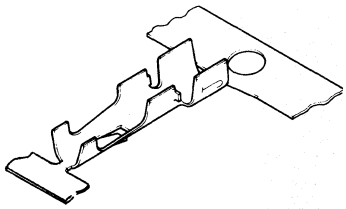
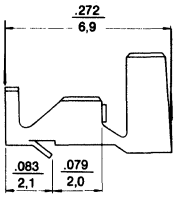
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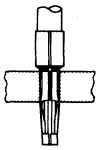
Ordering Information

Order No.	Wire Gauge	Insulation Diameter	Terminal	Contact Material	Automatic Tooling	
					Press	Crimp Die
08-70-0060	AWG #22 ~ #26	1.3 ~ 1.7 MAX. ϕ	Chain Form	Tin Plated Brass	11-26-0033 M15A	JM5865A 11-26-0093

5298 Series
P.C. Board Crimp Terminal

- Secures wire to P.C. board before wave soldering
- Rapid and economical means of hand wiring P.C. boards
- Wire solders directly to P.C. board
- No additional contact resistance
- Low profile
- Recommended P.C. board hole diameter .071 +.001/-0 (1,8 +0,1/-0)

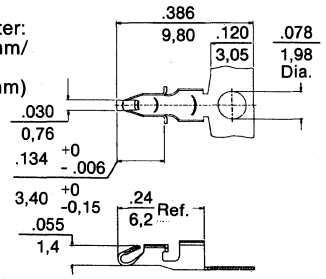


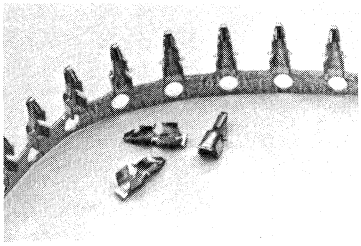
Ordering Information

Order No.	Wire Gauge	Insulation Diameter	Terminal	Contact Material	Automatic Tooling	
					Press	Crimp Die
08-70-0106	AWG #18 ~ #22	ϕ 3,05 MAX.	Chain Form	Tin Plated Brass	11-26-0033 M15A	JM5998A 11-26-0104

90198 Series

- Low profile
- Terminal locking lance holds wire in PCB for flow soldering
- Design allows both wire and terminal to be soldered and assures proper solder flow
- Insulation support prevents damage to the wire or solder joint
- Total height above PCB is less than most components (.106"/2,8mm)
- No terminal resistance, resistance is limited to integrity of the solder joint
- Application tooling available. See below
- PCB mounting hold diameter: 22 AWG .048"/.051" (1,23mm/ 1.30mm); 24 and 26 AWG .046"/.049" (1,17mm/1,25mm)
- PCB thickness .054"/.070" (1,37mm/1,77mm)






Ordering Information

Order No.	Wire Gauge AWG	Insulation (Max.)	Terminal	Contact Material	Application Tooling
90198-0001	22, 24, 26	.060" 1,52	Reels of 10,000	Tin/Lead Plated Phosphor Bronze	See Below

Application Tooling: Molex Euro TM40 Crimp Terminator, Eng. No. 69001

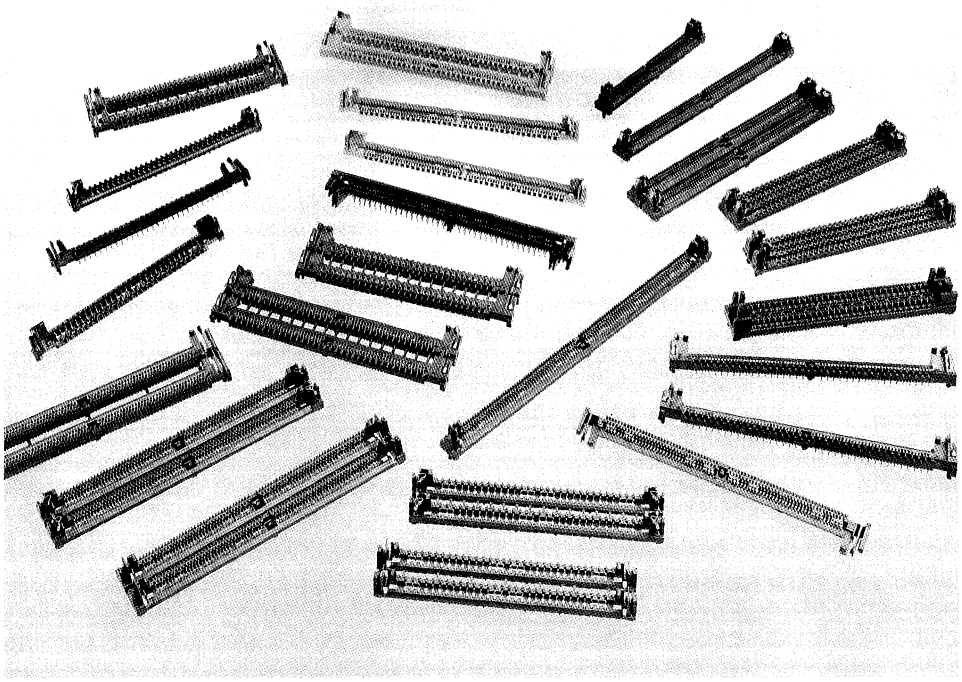
	Order No.
Complete Terminator Module Assembly	69001-1024
Applicator Only	69001-0171

Contact factory for tooling variations

SIMM Sockets and Edge Connectors

molex®

Contents



F

SIMM Sockets

.100 Pitch Right Angle 3F
.100 Pitch Vertical 4F-9F
.100 Pitch Low Profile (25°) 10F-13F
.050 Pitch Vertical 14F-21F
.050 Pitch Low Profile (22.5°) 22F-25F
.050 Pitch Low Profile (40°) 26F-29F
.050 Right Angle 30F-31F

Double Sided Edge Connectors

.100 2,54mm P.C. Tail (Solder Tail) Connectors 33F-40F
.050" 1,27mm EISA Connector 41F
.156 3,96mm Crimp Housing 42F
P.C. Crimp and Solder Eyelet Terminals 43F

Single Sided Edge Connectors

.156" 3,96mm P.C. Tail (Solder Tail) Connectors 44F
.156" 3,96mm International P.C. Housing for Crimp Terminals 45F
Crimp Terminals 46F-47F
.156" 3,96mm Polarized Housing 48F
Polarized Housing with Positive Lock 49F

SIMM Socket for High Density Packaging

SIMM Socket

Sockets for Leadless Single-In-Line Memory Modules

- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- High pressure tin contact system provides reliable interface
- Guaranteed two points of contact per read-out with standard JEDEC module .047 to .054
- Accepts modules of any type, such as memory, I/O, and other custom circuits
- Anti-overstress latch feature provides extra protection during module removal
- JEDEC standard dimensions
- U.L. File #E29179, CSA File #LR19980

Mechanical:

Contact Force: In excess of 150 grams per circuit initial average

Terminal Retention in Socket: 2 lbs. per circuit min.

Mating Cycles: 25 (tested) tin system

Electrical:

Contact Resistance: 30 milliohms max. initial

Insulation Resistance: 1 megohm min @ 500 V. AC initial

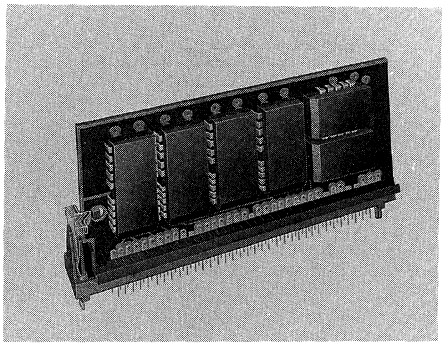
Dielectric Strength: 1500 V RMS

Rated Voltage: 250 V.

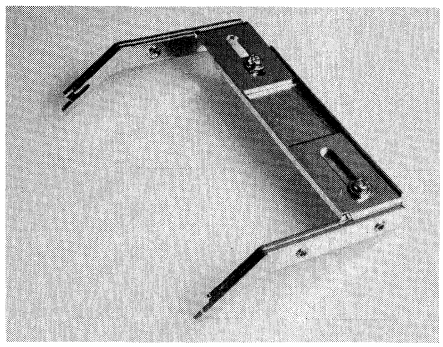
Capacitance Between Terminals: 2 picofarads

Environmental:

Temperature Rating: -40°C - +80°C (operating/storage)



New Improved Metal Latch



SIMM Module Extractor Tool

Specifications

Material:

Housing: LCP - Liquid crystal polymer 94V-0, glass filled

Contacts: Phosphor Bronze Alloy (standard) or Beryllium Copper (optional)

Latch: Stainless Steel or Plastic

Plating:

Post Plate 200 µin (5,08 µM) min. tin/lead over 50 µin. (1,27 µM) min. nickel overall

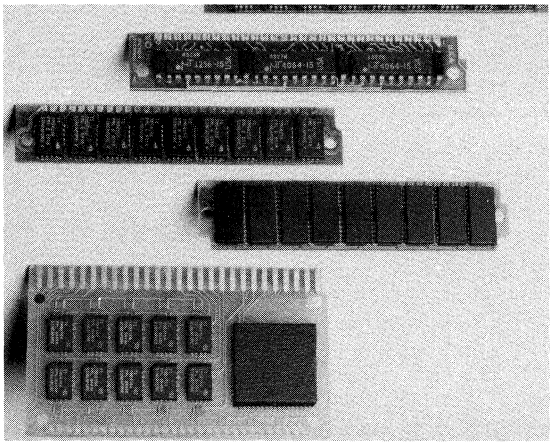
Select plated 30µ in. min. gold in mating area and 200µ in. min. tin/lead on the tails over 75µ in. nickel overall

Ordering Information

SIMM Extractor Tool	89500-0001

Features of Customer-Supplied SIP Module

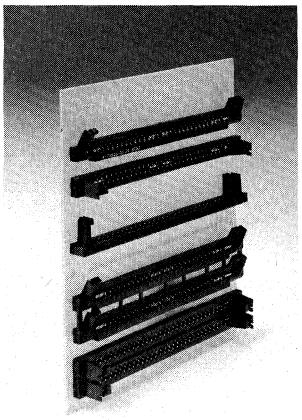
- Leadless - no broken or bent pins
- Surface mountable components
- JEDEC standard module dimensions .050 + .004 - .003 thick PCB
- Fully-tested, ready-to-use assemblies
- Easily ejected from socket for replacement

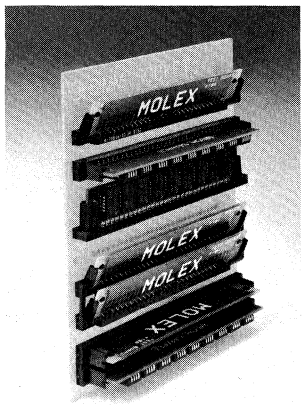


Shown: Variety of SIP modules (customer supplied)

Shown Left: SIMM Sockets mounted on P.C. board.

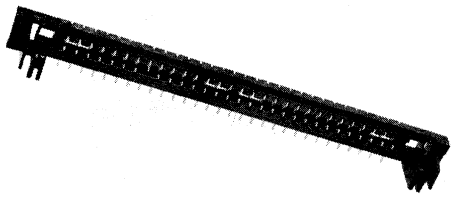
Shown Right: SIP modules inserted into SIMM Sockets mounted on P.C. board.



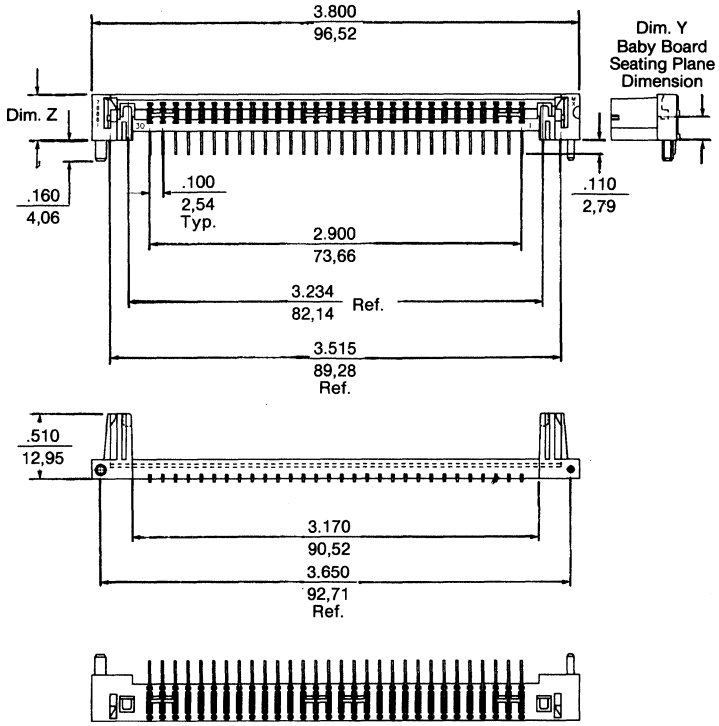


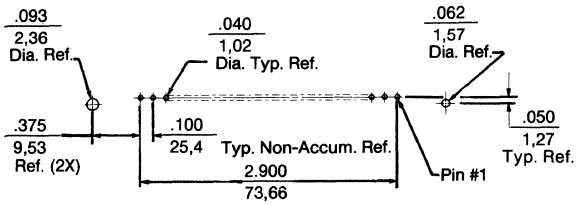
SIMM Socket
Right Angle, Plastic Latch

78906 Series
Single Row (30 Circuit)
.100" Contact Spacing
Lowest Mated Height



- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Molded-in polarizing posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- High pressure tin contact system provides reliable interface
- Accepts modules of any type such as memory, I/O, and other custom circuits
- JEDEC standard dimensions
- Product specification PSX-78859 (Phos. Br.)





Recommended Socket PC Board Hole Pattern

Ordering Information

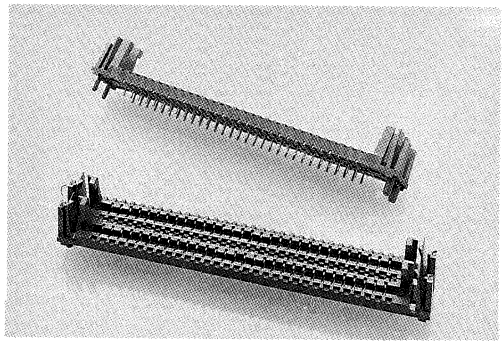
CIRCUITS	ORDER NO.		PLATING	DIM. Y		DIM. Z		POLARIZATION
	SINGLE SIDED MODULE APPLICATIONS	DUAL SIDED MODULE APPLICATIONS						
30	15-46-0451	—	Tin[1]	.145	3,68	.315	8,00	*Standard
30	15-46-0452	—	Gold[2]	.145	3,68	.315	8,00	*Standard
30	15-46-0454	—	Tin[1]	.145	3,68	.315	8,00	**Reversed
30	—	15-46-0450	Tin[1]	.190	4,83	.360	9,14	*Standard
30	—	15-46-0462	Gold[2]	.190	4,83	.360	9,14	*Standard
30	—	15-46-0455	Tin[1]	.290	7,37	.460	11,68	*Standard

* Top of board applications
** Bottom of board applications

[1]Post plated 200μ in. min. tin/lead over 50μ in. min. nickel overall
[2]Post plated 30μ in. min. gold over 70μ in. min. nickel overall

SIMM Socket
Vertical (Upright), Plastic Latch

78961 Series
.100" x .300" (2.54 x 7.62) Spacing
Dual Row with Plastic Latches
Hi-Temp. Surface Mount Compatible



- Specially designed plastic latch with anti-overstress feature
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- Guaranteed two points of contact per read-out with the JEDEC standard module
- High pressure contact system in both tin/lead or gold option for reliable interface
- Audible click ensures module is properly seated
- Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- Polarization posts provide orientation for proper loading of socket into P.C. board
- Polarization rib properly orients module to socket
- JEDEC standard dimensions

F

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

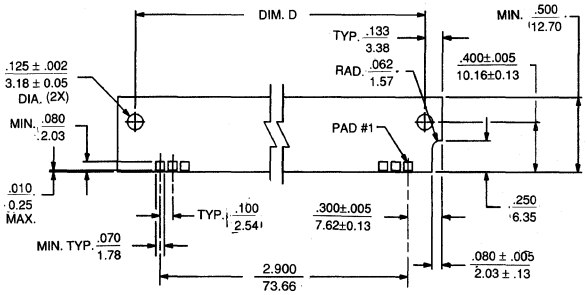
Terminal: Phosphor Bronze Alloy

Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

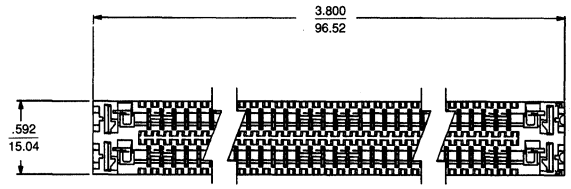
- or -

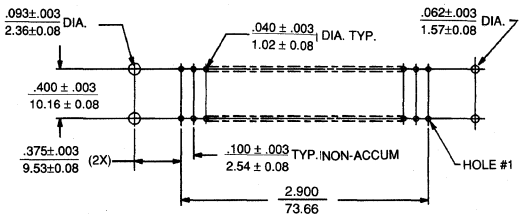
Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

Product Specification: PS 78956

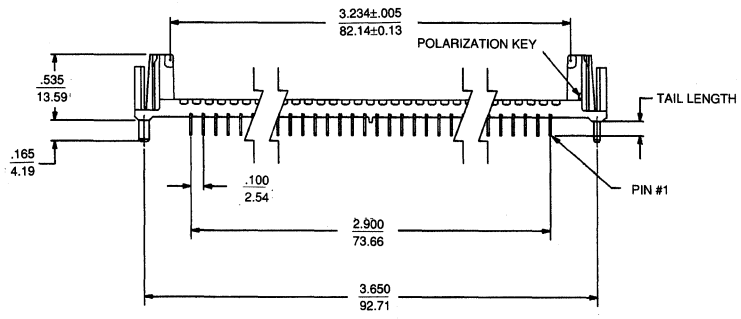


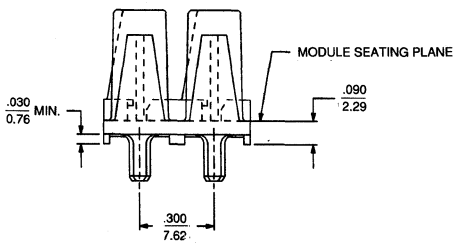
"SIMM" P.C. Board Layout





Recommended Socket P.C. Board Layout





END VIEW

Ordering Information

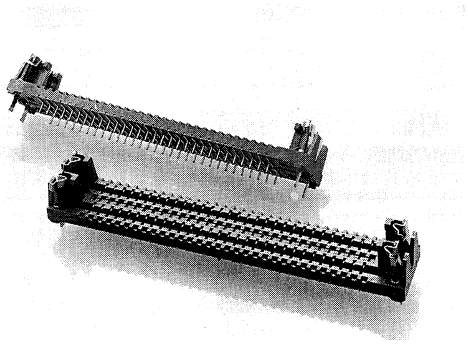
Order No.	No. of Pos.	Plating	Tail Length
•15-46-3824	30	Tin	.110 (2.79)
—	30	Gold	.110 (2.79)
—	30	Tin	.125 (3.18)
—	30	Gold	.125 (3.18)

Contact local Molex sales office for assistance or options

• U.S. Standard Product, available through Molex franchised distributors.

SIMM Socket
Vertical (Upright), Metal Latch

78961 Series
.100" x .300" (2.54 x 7.62) Spacing
Dual Row with Metal Latches
Hi-Temp. Surface Mount Compatible



- ☐ Metal latches eliminate breakage during abuse or misuse of socket
- ☐ Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- ☐ High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- ☐ Guaranteed two points of contact per read-out with the JEDEC standard module
- ☐ High pressure contact system in both tin/lead or gold option for reliable interface
- ☐ Audible click ensures module is properly seated
- ☐ Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- ☐ Polarization posts provide orientation for proper loading of socket into P.C. board
- ☐ Polarization rib properly orients module to socket
- ☐ JEDEC standard dimensions

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

Terminal: Phosphor Bronze Alloy

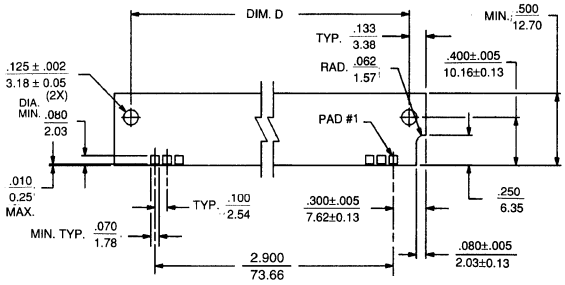
Plating: Post Plate 200μ" min. tin/lead over 50μ" min. nickel overall

- or -

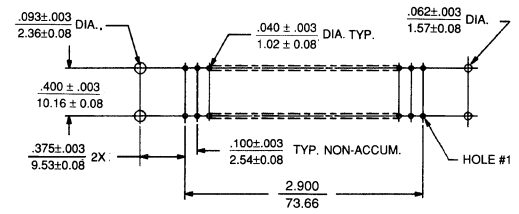
Post Plate 30μ" min. gold on contact area and 150μ" min. tin/lead on solder tails, all over 75μ" min. nickel

Latch: Stainless steel

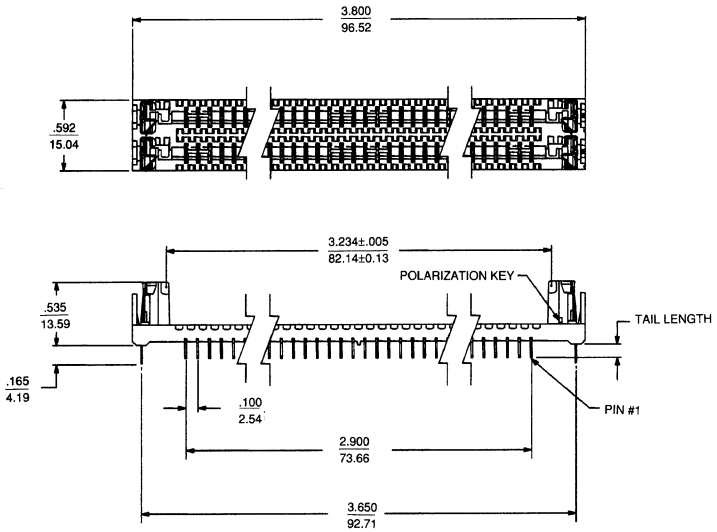
Product Specification: PS 78956

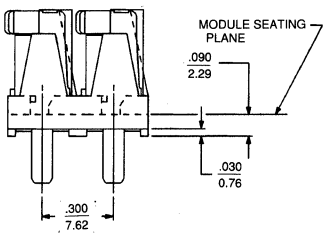


"SIMM" P.C. Board Layout



Recommended Socket P.C. Board Layout





END VIEW

Ordering Information

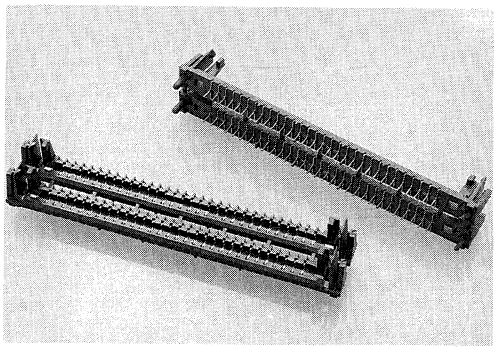
Order No.	No. of Pos.	Plating	Tail Length
•15-46-3814	30	Tin	.110 (2.79)
•15-46-3904	30	Gold	.110 (2.79)
15-46-3934	30	Tin	.125 (3.18)
15-46-3949	30	Gold	.125 (3.18)

Contact local Molex sales office for assistance or options

• U.S. Standard Product, available through Molex franchised distributors.

SIMM Socket
Vertical (Upright), Plastic Latch

78956 Series
.100" x .400" (2.54 x 10.16) Spacing
Dual Row with Plastic Latch
Hi-Temp. Surface Mount Compatible



- Specially designed plastic latch with anti-overstress feature
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- Guaranteed two points of contact per read-out with the JEDEC standard module
- High pressure contact system in both tin/lead or gold option for reliable interface
- Audible click ensures module is properly seated
- Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- Polarization posts provide orientation for proper loading of socket into P.C. board
- Polarization rib properly orients module to socket
- JEDEC standard dimensions

F

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

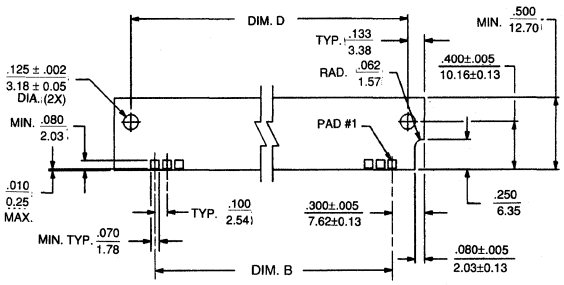
Terminal: Phosphor Bronze Alloy

Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

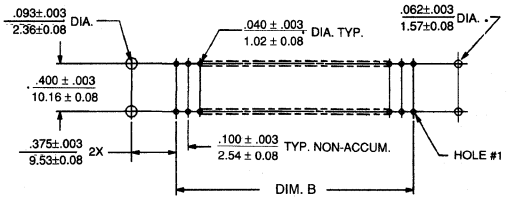
- or -

Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

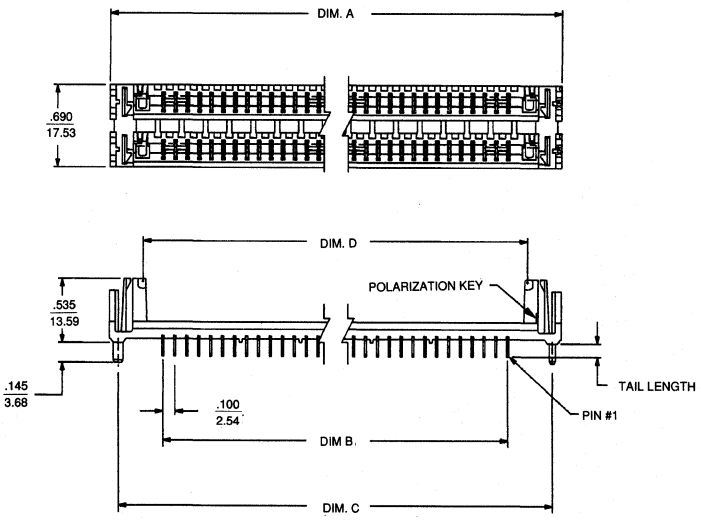
Product Specification: PS 78956

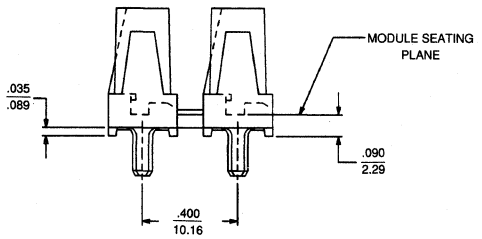


"SIMM" P.C. Board Layout



Recommended Socket P.C. Board Layout





END VIEW

Ordering Information

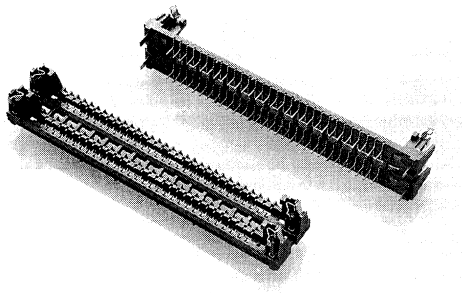
Order No.	No. of Pos.	Plating	Tail Length	Dimension			
				A	B	C	D
•15-46-3603	30	Tin	.110 (2.79)	3.80 (95.62)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
•15-46-3523	30	Gold	.110 (2.79)	3.80 (95.62)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
15-46-3533	30	Tin	.125 (3.18)	4.30 (109.2)	3.40 (86.36)	4.15 (105.4)	3.23 (82.14)
Contact Factory	35	Tin	.125 (3.18)	4.30 (109.2)	3.40 (86.36)	4.15 (105.4)	3.73 (94.84)
Contact Factory	40	Tin	.125 (3.18)	4.80 (121.9)	3.90 (99.1)	4.65 (118.1)	4.23 (107.5)
Contact Factory	40	Tin	.110 (2.79)	4.80 (121.9)	3.90 (99.1)	4.65 (118.1)	4.23 (107.5)
Contact Factory	42	Tin	.125 (3.18)	5.00 (127.0)	4.10 (104.1)	4.85 (123.2)	4.43 (112.6)
Contact Factory	42	Tin	.110 (2.79)	5.00 (127.0)	4.10 (104.1)	4.85 (123.2)	4.43 (112.6)
Contact Factory	45	Tin	.125 (3.18)	5.30 (134.6)	4.40 (111.8)	5.15 (130.8)	4.73 (120.2)
Contact Factory	45	Tin	.110 (2.79)	5.30 (134.6)	4.40 (111.8)	5.15 (130.8)	4.73 (120.2)

Contact local Molex sales office for assistance or options

• U.S. Standard Product, available through Molex franchised distributors.

SIMM Socket
Vertical (Upright), Metal Latch

78956 Series
.100" x .400" (2.54 x 10.16) Spacing
Dual Row with Metal Latches
Hi-Temp. Surface Mount Compatible



- Metal latches eliminate breakage during abuse or misuse of socket
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- Guaranteed two points of contact per read-out with the JEDEC standard module
- High pressure contact system in both tin/lead or gold option for reliable interface
- Audible click ensures module is properly seated
- Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- Polarization posts provide orientation for proper loading of socket into P.C. board
- Polarization rib properly orients module to socket
- JEDEC standard dimensions

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

Terminal: Phosphor Bronze Alloy

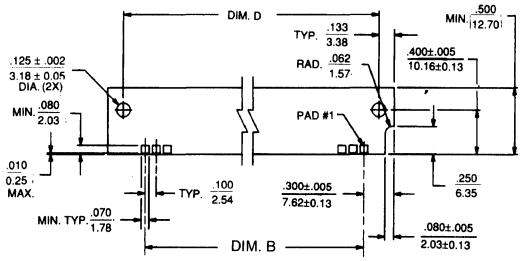
Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

- or -

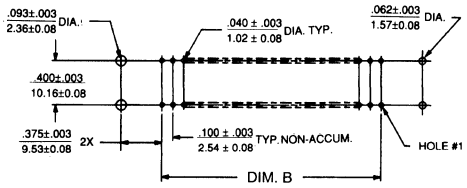
Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

Latch: Stainless steel

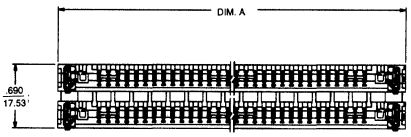
Product Specification: PS 78956

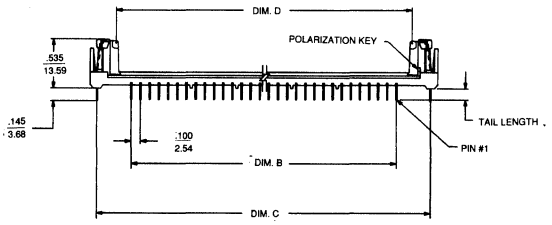


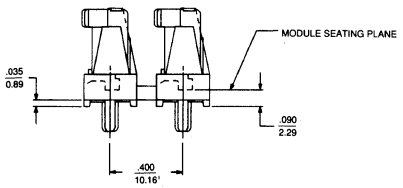
"SIMM" P.C. Board Layout



Recommended Socket P.C. Board Layout







END VIEW

Ordering Information

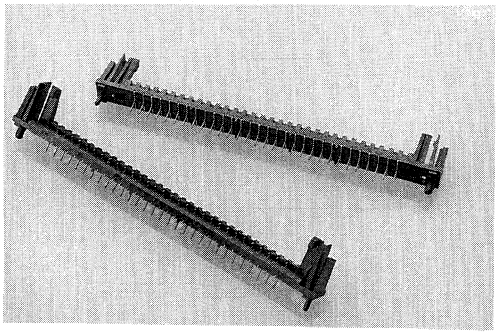
Order No.	No. of Pos.	Plating	Tail Length	Dimension			
				A	B	C	D
•15-46-3553	30	Tin	.110 (2.79)	3.80 (95.62)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
•15-46-3543	30	Gold	.110 (2.79)	3.80 (95.62)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
15-46-3623	30	Tin	.125 (3.18)	3.80 (96.52)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
15-46-3563	35	Tin	.110 (2.79)	4.30 (109.2)	3.40 (86.36)	4.15 (105.4)	3.73 (94.84)
Contact Factory	35	Gold	.110 (2.79)	4.30 (109.2)	3.40 (86.36)	4.15 (105.4)	3.73 (94.84)
15-46-3573	40	Tin	.110 (2.79)	4.80 (121.9)	3.90 (99.1)	4.65 (118.1)	4.23 (107.5)
Contact Factory	40	Gold	.110 (2.79)	4.80 (121.9)	3.90 (99.1)	4.65 (118.1)	4.23 (107.5)
15-46-3583	42	Tin	.110 (2.79)	5.00 (127.0)	4.10 (104.1)	4.85 (123.2)	4.43 (112.6)
Contact Factory	42	Gold	.110 (2.79)	5.00 (127.0)	4.10 (104.1)	4.85 (123.2)	4.43 (112.6)
15-46-3593	45	Tin	.110 (2.79)	5.30 (134.6)	4.40 (111.8)	5.15 (130.8)	4.73 (120.2)
Contact Factory	45	Gold	.110 (2.79)	5.30 (134.6)	4.40 (111.8)	5.15 (130.8)	4.73 (120.2)

Contact local Molex sales office for assistance or options

• U.S. Standard Product, available through Molex franchised distributors.

SIMM Socket
Vertical (Upright), Plastic Latch

78957 Series
.100" (2.54) Spacing
Single Row with Plastic Latches
Hi-Temp. Surface Mount Compatible



- Specially designed plastic latch with anti-overstress feature
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- Guaranteed two points of contact per read-out with the JEDEC standard module
- High pressure contact system in both tin/lead or gold option for reliable interface
- Audible click ensures module is properly seated
- Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- Polarization posts provide orientation for proper loading of socket into P.C. board
- Polarization rib properly orients module to socket
- JEDEC standard dimensions

F

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

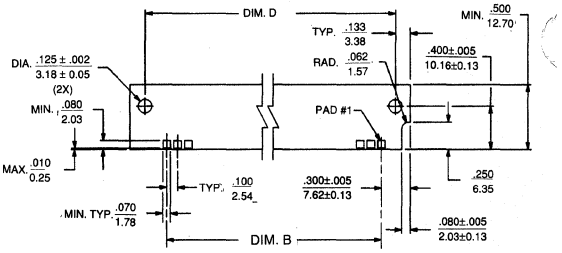
Terminal: Phosphor Bronze Alloy

Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

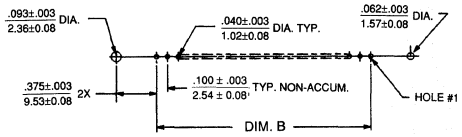
- or -

Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

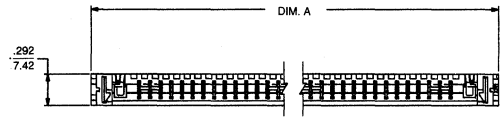
Product Specification: PS 78956

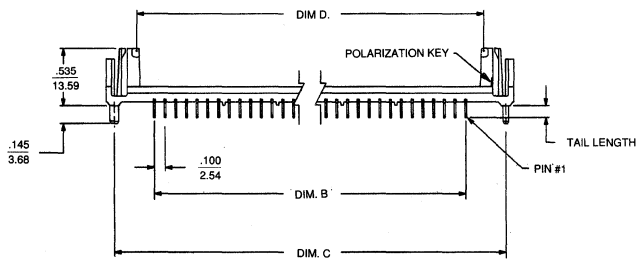


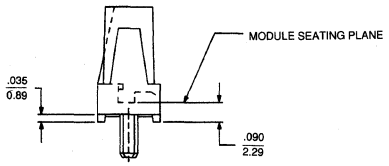
"SIMM" P.C. Board Layout



Recommended Socket P.C. Board Layout







END VIEW

Ordering Information

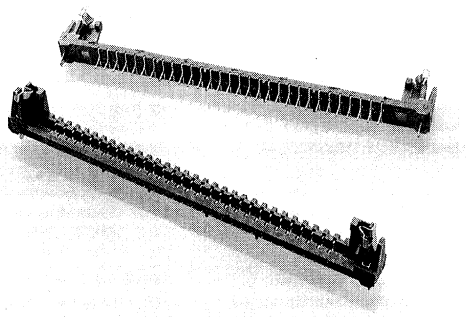
Order No.	No. of Pos.	Plating	Tail Length	Dimension			
				A	B	C	D
•15-46-3083	30	Tin	.110 (2.79)	3.80 (95.62)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
•15-46-3023	30	Gold	.110 (2.79)	3.80 (95.62)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
15-46-3033	30	Tin	.125 (3.18)	4.30 (109.2)	3.40 (86.36)	4.15 (105.4)	3.23 (82.14)
15-46-3063	35	Tin	.125 (3.18)	4.30 (109.2)	3.40 (86.36)	4.15 (105.4)	3.73 (94.84)
Contact Factory	35	Tin	.110 (2.79)	4.30 (109.2)	3.40 (86.36)	4.15 (105.4)	3.73 (94.84)
15-46-3093	40	Tin	.125 (3.18)	4.80 (121.9)	3.90 (99.10)	4.65 (118.1)	4.23 (107.5)
Contact Factory	40	Tin	.110 (2.79)	4.80 (121.9)	3.90 (99.10)	4.65 (118.1)	4.23 (107.5)
15-46-3103	42	Tin	.125 (3.18)	5.00 (127.0)	4.10 (104.1)	4.85 (123.2)	4.43 (112.6)
Contact Factory	42	Tin	.110 (2.79)	5.00 (127.0)	4.10 (104.1)	4.85 (123.2)	4.43 (112.6)
15-46-3073	45	Tin	.125 (3.18)	5.30 (134.6)	4.40 (111.8)	5.15 (130.8)	4.73 (120.2)
15-46-3153	45	Tin	.110 (2.79)	5.30 (134.6)	4.40 (111.8)	5.15 (130.8)	4.73 (120.2)

Contact local Molex sales office for assistance or options

• U.S. Standard Product, available through Molex franchised distributors.

SIMM Socket
Vertical (Upright), Metal Latch

78957 Series
.100" (2.54) Spacing
Single Row with Metal Latches
Hi-Temp. Surface Mount Compatible



- Metal latches eliminate breakage during abuse or misuse of socket
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- Guaranteed two points of contact per read-out with the JEDEC standard module
- High pressure contact system in both tin/lead or gold option for reliable interface
- Audible click ensures module is properly seated
- Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- Polarization posts provide orientation for proper loading of socket into P.C. board
- Polarization rib properly orients module to socket
- JEDEC standard dimensions

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

Terminal: Phosphor Bronze Alloy

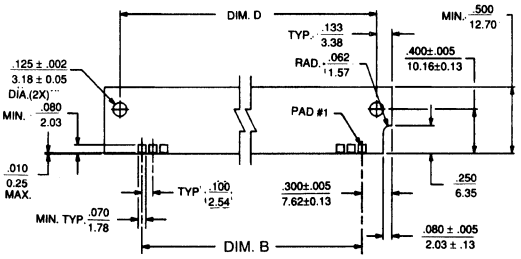
Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

- or -

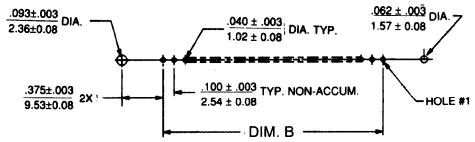
Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

Latch: Stainless steel

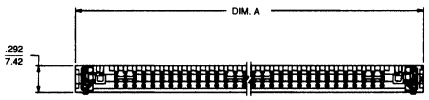
Product Specification: PS 78956

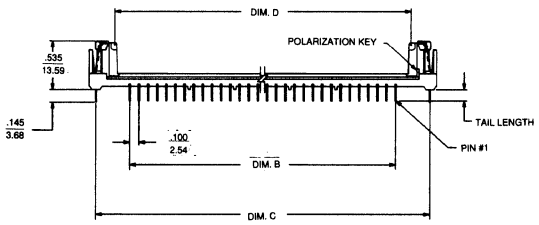


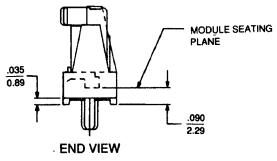
"SIMM" P.C. Board Layout



Recommended Socket P.C. Board Layout







Ordering Information

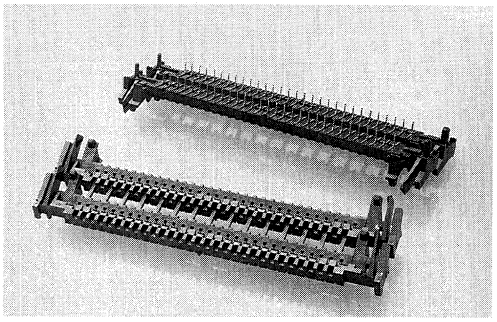
Order No.	No. of Pos.	Plating	Tail Length	Dimension			
				A	B	C	D
•15-46-3053	30	Tin	.110 (2.79)	3.80 (95.62)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
•15-46-3043	30	Gold	.110 (2.79)	3.80 (95.62)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
15-46-3163	30	Tin	.125 (3.18)	3.80 (96.52)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
15-46-3113	35	Tin	.110 (2.79)	4.30 (109.2)	3.40 (86.36)	4.15 (105.4)	3.73 (94.84)
Contact Factory	35	Tin	.125 (3.18)	4.30 (109.2)	3.40 (86.36)	4.15 (105.4)	3.73 (94.84)
15-46-3123	40	Tin	.110 (2.79)	4.80 (121.9)	3.90 (99.10)	4.65 (118.1)	4.23 (107.5)
Contact Factory	40	Tin	.125 (3.18)	4.80 (121.9)	3.90 (99.10)	4.65 (118.1)	4.23 (107.5)
15-46-3133	42	Tin	.110 (2.79)	5.00 (127.0)	4.10 (104.1)	4.85 (123.2)	4.43 (112.6)
Contact Factory	42	Tin	.125 (3.18)	5.00 (127.0)	4.10 (104.1)	4.85 (123.2)	4.43 (112.6)
15-46-3143	45	Tin	.110 (2.79)	5.30 (134.6)	4.40 (111.8)	5.15 (130.8)	4.73 (120.2)
Contact Factory	45	Tin	.125 (3.18)	5.30 (134.6)	4.40 (111.8)	5.15 (130.8)	4.73 (120.2)

Contact local Molex sales office for assistance or options

• U.S. Standard Product, available through Molex franchised distributors.

SIMM Socket
Low Profile (25°), Plastic Latch

78916 Series
.100" x .500" (2.54 x 12.70) Spacing
Dual Row with Plastic Latches
Hi-Temp. Surface Mount Compatible



- Specially designed plastic latch with anti-overstress feature
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- Guaranteed two points of contact per read-out with the JEDEC standard module
- High pressure contact system in both tin/lead or gold option for reliable interface
- Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- Polarization posts provide orientation for proper loading of socket into P.C. board
- Polarization rib properly orients module to socket
- JEDEC standard dimensions

F

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

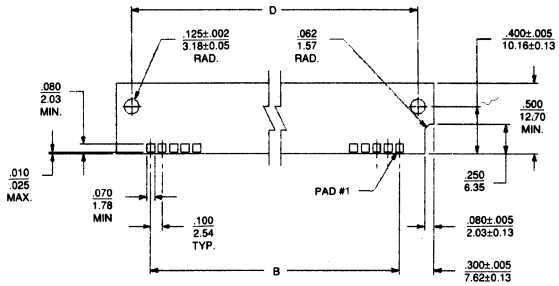
Terminal: Phosphor Bronze Alloy

Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

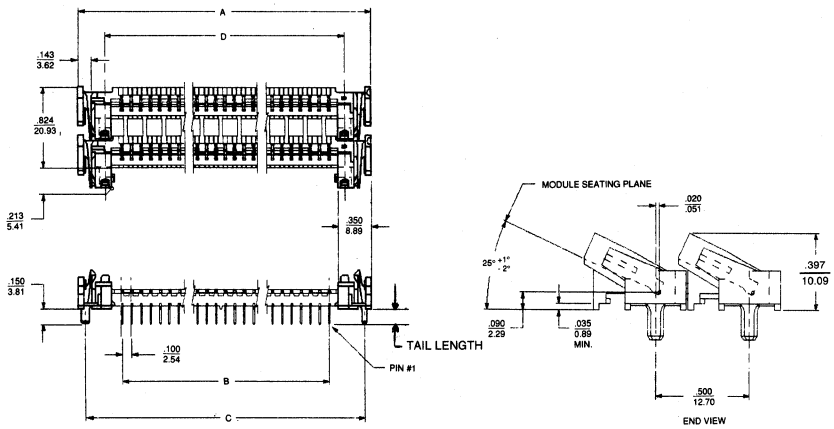
- or -

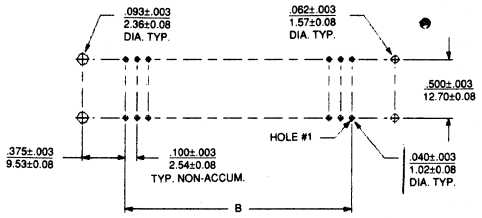
Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

Product Specification: PS 78956



"SIMM" P.C. Board Layout





Recommended Socket P.C. Board Layout

Ordering Information

Order No.	No. of Pos.	Plating	Tail Length	Dimension			
				A	B	C	D
15-46-3554	30	Tin	.125 (3.18)	3.80 (96.52)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
•15-46-3524	30	Gold	.110 (2.79)	3.80 (96.52)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
•15-46-3574	30	Tin	.110 (2.79)	3.80 (96.52)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
15-46-3584[1]	30	Tin	.125 (3.18)	3.80 (96.52)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
15-46-3654[1]	30	Tin	.110 (2.79)	3.80 (96.52)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
15-46-3604	35	Tin	.110 (2.79)	4.30 (109.2)	3.40 (86.36)	4.15 (105.4)	3.73 (94.84)
15-46-3614	40	Tin	.110 (2.79)	4.80 (121.9)	3.90 (99.10)	4.65 (118.1)	4.23 (107.5)
15-46-3624	42	Tin	.110 (2.79)	5.00 (127.0)	4.10 (104.1)	4.85 (123.2)	4.43 (112.6)
15-46-3634	45	Tin	.110 (2.79)	5.30 (134.6)	4.40 (111.8)	5.15 (130.8)	4.73 (120.2)

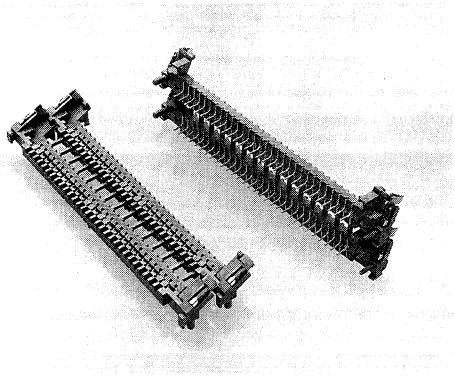
[1] Housing color is Natural

Contact local Molex sales office for assistance or options

• U.S. Standard Product, available through Molex franchised distributors.

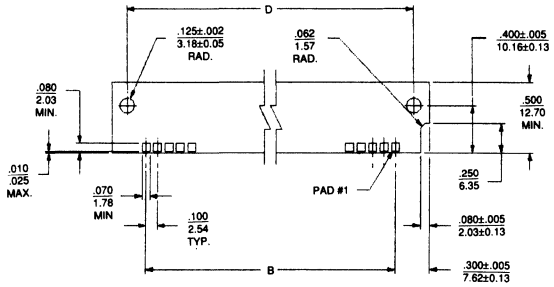
SIMM Socket
Low Profile (25°), Metal Latch

78916 Series
.100" x .500" (2.54 x 12.70) Spacing
Dual Row with Metal Latches
Hi-Temp. Surface Mount Compatible



- Metal latches eliminate breakage during abuse or misuse of socket
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- Guaranteed two points of contact per read-out with the JEDEC standard module
- High pressure contact system in both tin/lead or gold option for reliable interface
- Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- Polarization posts provide orientation for proper loading of socket into P.C. board
- Polarization rib properly orients module to socket
- JEDEC standard dimensions

F



"SIMM" P.C. Board Layout

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

Terminal: Phosphor Bronze Alloy

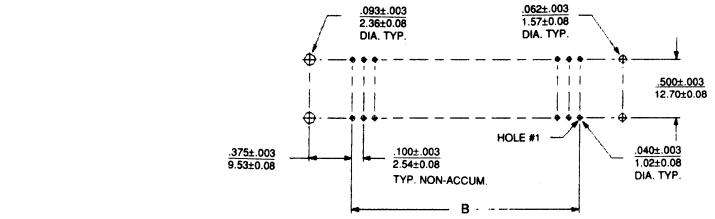
Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

- or -

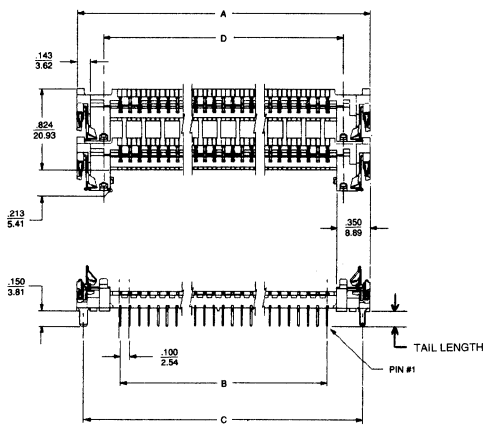
Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

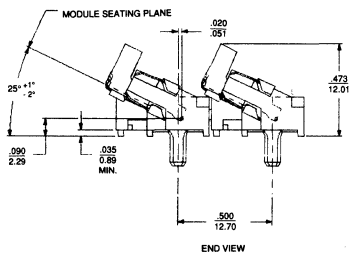
Latch: Stainless steel

Product Specification: PS 78956



Recommended Socket P.C. Board Layout





END VIEW

Ordering Information

Order No.	No. of Pos.	Plating	Tail Length	Dimension			
				A	B	C	D
15-46-3544	30	Tin	.125 (3.18)	3.80 (96.52)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
•15-46-3534	30	Gold	.110 (2.79)	3.80 (96.52)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
•15-46-3564	30	Tin	.110 (2.79)	3.80 (96.52)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
15-46-3594[1]	30	Tin	.125 (3.18)	3.80 (96.52)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
15-46-3644[1]	30	Tin	.110 (2.79)	3.80 (96.52)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
Contact Factory	35	Tin	.110 (2.79)	4.30 (109.22)	3.40 (86.36)	4.15 (105.4)	3.73 (94.84)
Contact Factory	40	Tin	.110 (2.79)	4.80 (121.9)	3.90 (99.10)	4.65 (118.1)	4.23 (107.5)
Contact Factory	42	Tin	.110 (2.79)	5.00 (127.0)	4.10 (104.1)	4.85 (123.2)	4.43 (112.6)
Contact Factory	45	Tin	.110 (2.79)	5.30 (134.6)	4.40 (111.8)	5.15 (130.8)	4.73 (120.2)

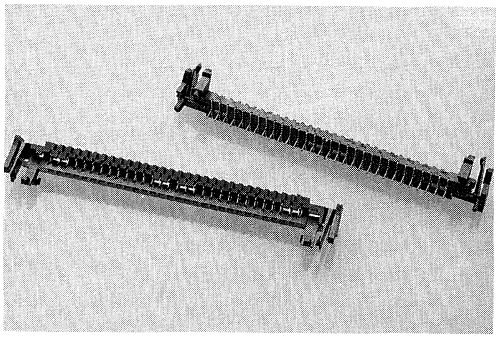
[1] Housing color is Natural

Contact local Molex sales office for assistance or options

• U.S. Standard Product, available through Molex franchised distributors.

SIMM Socket
Low Profile (25°), Plastic Latch

78917 Series
.100" (2.54) Spacing
Single Row with Plastic Latches
Hi-Temp. Surface Mount Compatible



- Specially designed plastic latch with anti-overstress feature
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- Guaranteed two points of contact per read-out with the JEDEC standard module
- High pressure contact system in both tin/lead or gold option for reliable interface
- Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- Polarization posts provide orientation for proper loading of socket into P.C. board
- Polarization rib properly orients module to socket
- JEDEC standard dimensions
- Contact factory for center spacing

F

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

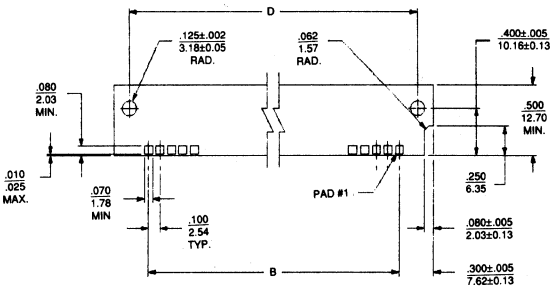
Terminal: Phosphor Bronze Alloy

Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

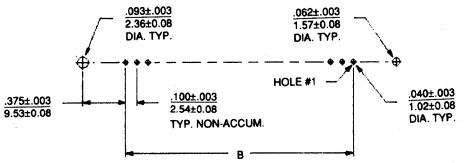
- or -

Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

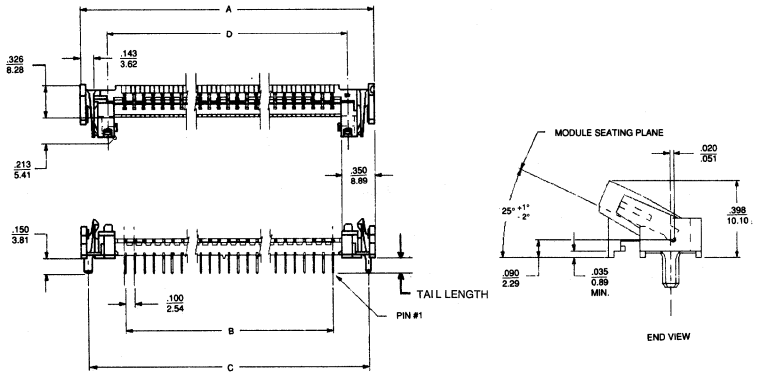
Product Specification: PS 78956



"SIMM" P.C. Board Layout



Recommended Socket P.C. Board Layout



Ordering Information

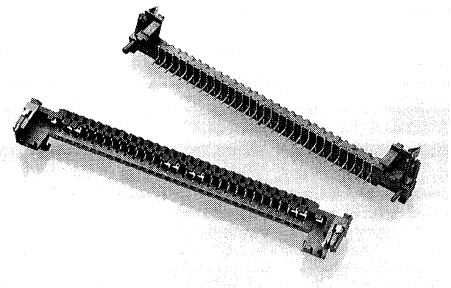
Order No.	No. of Pos.	Plating	Tail Length	Dimension			
				A	B	C	D
15-46-3034	30	Tin	.125 (3.18)	3.80 (96.52)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
•15-46-3024	30	Gold	.110 (2.79)	3.80 (96.52)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
•15-46-3054	30	Tin	.110 (2.79)	3.80 (96.52)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
15-46-3064	35	Tin	.110 (2.79)	4.30 (109.2)	3.40 (86.36)	4.15 (105.4)	3.73 (94.84)
15-46-3074	40	Tin	.110 (2.79)	4.80 (121.9)	3.90 (99.10)	4.65 (118.1)	4.23 (107.5)
15-46-3084	42	Tin	.110 (2.79)	5.00 (127.0)	4.10 (104.1)	4.85 (123.2)	4.43 (112.6)
15-46-3094	45	Tin	.110 (2.79)	5.30 (134.6)	4.40 (111.8)	5.15 (130.8)	4.73 (120.2)

Contact local Molex sales office for assistance or additional options

• U.S. Standard Product, available through Molex franchised distributors.

SIMM Socket
Low Profile (25°), Metal Latch

78917 Series
.100" (2.54) Spacing
Single Row with Metal Latches
Hi-Temp. Surface Mount Compatible



- Metal latches eliminate breakage during abuse or misuse of socket
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- Guaranteed two points of contact per read-out with the JEDEC standard module
- High pressure contact system in both tin/lead or gold option for reliable interface
- Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- Polarization posts provide orientation for proper loading of socket into P.C. board
- Polarization rib properly orients module to socket
- JEDEC standard dimensions
- Contact factory for minimum connector-to-connector center spacing

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

Terminal: Phosphor Bronze Alloy

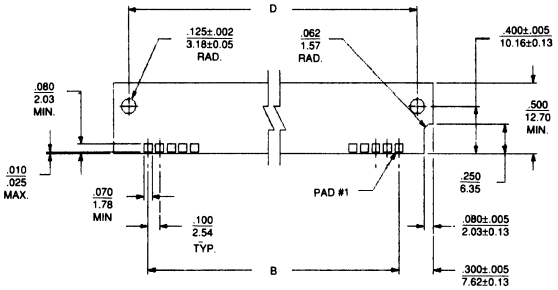
Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

- or -

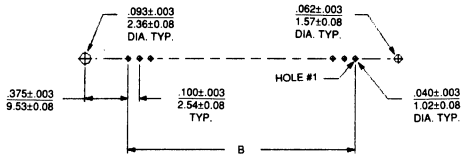
Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

Latch: Stainless steel

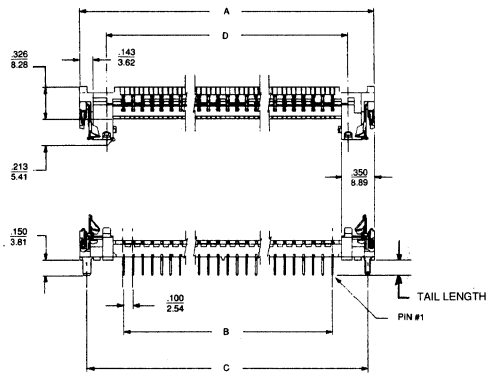
Product Specification: PS 78956

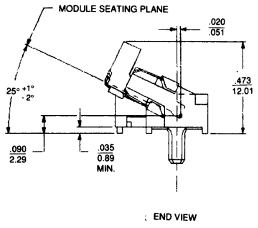


"SIMM" P.C. Board Layout



Recommended Socket P.C. Board Layout





END VIEW

Ordering Information

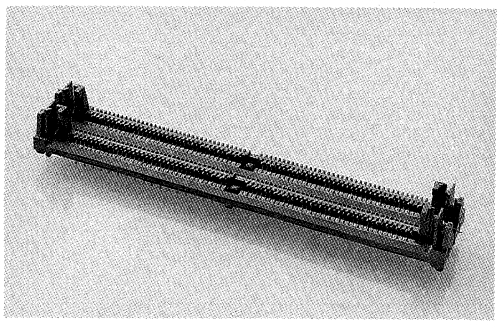
Order No.	No. of Pos.	Plating	Tail Length	Dimension			
				A	B	C	D
15-46-3044	30	Tin	.125 (3.18)	3.80 (96.52)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
Contact Factory	30	Gold	.110 (2.79)	3.80 (96.52)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
•15-46-3104	30	Tin	.110 (2.79)	3.80 (96.52)	2.90 (73.66)	3.65 (92.71)	3.23 (82.14)
Contact Factory	35	Tin	.110 (2.79)	4.30 (109.22)	3.40 (86.36)	4.15 (105.4)	3.73 (94.84)
Contact Factory	40	Tin	.110 (2.79)	4.80 (121.9)	3.90 (99.10)	4.65 (118.1)	4.23 (107.5)
Contact Factory	42	Tin	.110 (2.79)	5.00 (127.0)	4.10 (104.1)	4.85 (123.2)	4.43 (112.6)
Contact Factory	45	Tin	.110 (2.79)	5.30 (134.6)	4.40 (111.8)	5.15 (130.8)	4.73 (120.2)

Contact local Molex sales office for assistance or options

• U.S. Standard Product, available through Molex franchised distributors.

SIMM Socket
Vertical (Upright), Plastic Latch

78954 Series Standard (Left) Polarization
.050" x .400" (1.27 x 10.16) Spacing
Dual Row with Plastic Latches
Hi-Temp. Surface Mount Compatible



- Specially designed plastic latch with anti-overstress feature
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- Guaranteed two points of contact per read-out with the JEDEC standard module
- High pressure contact system in both tin/lead or gold option for reliable interface
- Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- Polarization posts provide orientation for proper loading of socket into P.C. board
- Polarization rib properly orients module to socket
- Center retention posts maintain connector flush to P.C. board
- JEDEC standard dimensions

F

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

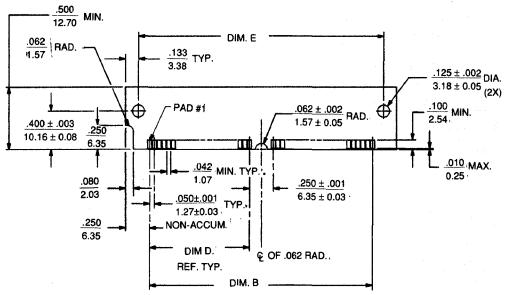
Terminal: Phosphor Bronze Alloy

Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

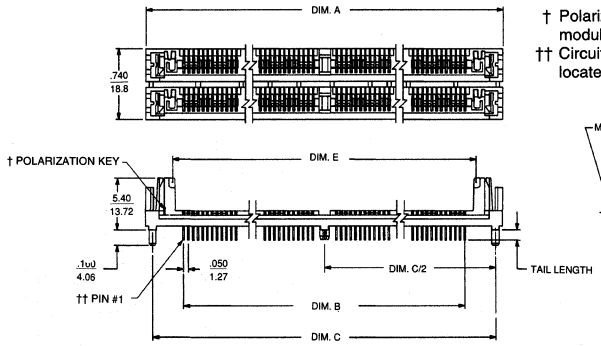
- or -

Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

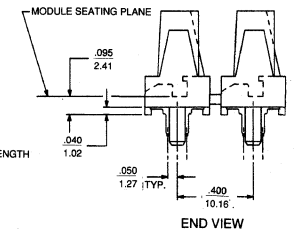
Product Specification: PS 78954

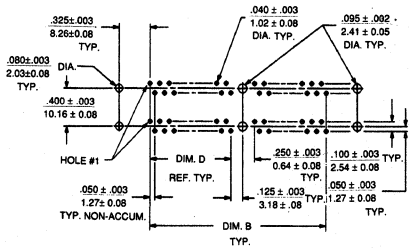


"SIMM" P.C. Board Layout



† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.





Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

Ordering Information

No. of Pos.	Order No. Tin Plate		Order No. Gold Plate		Tail Length	Dimensions				
	WITH Center Post	WITHOUT Center Post	WITH Center Post	WITHOUT Center Post		A	B	C	D	E
38	—	—	—	—	.110	2.85 (72.4)	2.05 (52.1)	2.70 (68.6)	.90 (22.86)	2.28 (58.01)
38	—	—	—	—	.125	2.85 (72.4)	2.05 (52.1)	2.70 (68.6)	.90 (22.86)	2.28 (58.01)
40	—	15-82-0705	—	—	.110	2.95 (74.9)	2.15 (54.6)	2.80 (71.1)	.95 (24.13)	2.38 (60.55)
40	—	—	—	—	.125	2.95 (74.9)	2.15 (54.6)	2.80 (71.1)	.95 (24.13)	2.38 (60.55)
64	•15-82-0713	—	—	—	.110	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
64	—	—	—	—	.125	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
68	•15-82-0709	—	—	—	.110	4.35 (110.5)	3.55 (90.2)	4.20 (106.7)	1.65 (41.91)	3.78 (96.11)
68	—	—	—	—	.125	4.35 (110.5)	3.55 (90.2)	4.20 (106.7)	1.65 (41.91)	3.78 (96.11)
72	•15-82-0701	—	•15-82-0702	—	.110	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
72	15-82-1702	—	—	—	.125	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
80	—	—	—	—	.110	4.95 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)
80	—	—	—	—	.125	4.95 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)
100	—	—	—	—	.110	5.95 (151.1)	5.15 (130.8)	5.80 (147.3)	2.45 (62.23)	5.38 (136.8)
100	—	—	—	—	.125	5.95 (151.1)	5.15 (130.8)	5.80 (147.3)	2.45 (62.23)	5.38 (136.8)

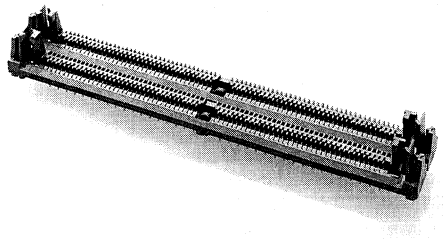
Contact local Molex sales office for assistance or options

Note 1: Contact Molex sales office for post options and P.C.B. hole sizes

• U.S. Standard product, available through Molex franchised distributors.

SIMM Socket
Vertical (Upright), Plastic Latch

78954 Series Reverse (Right) Polarization
.050" x .400" (1.27 x 10.16) Spacing
Dual Row with Plastic Latches
Hi-Temp. Surface Mount Compatible



- Specially designed plastic latch with anti-overstress feature
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- Guaranteed two points of contact per read-out with the JEDEC standard module
- High pressure contact system in both tin/lead or gold option for reliable interface
- Audible click ensures module is properly seated
- Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- Polarization posts provide orientation for proper loading of socket into P.C. board
- Polarization rib properly orients module to socket
- Center retention posts maintain connector flush to P.C. board
- JEDEC standard dimensions

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

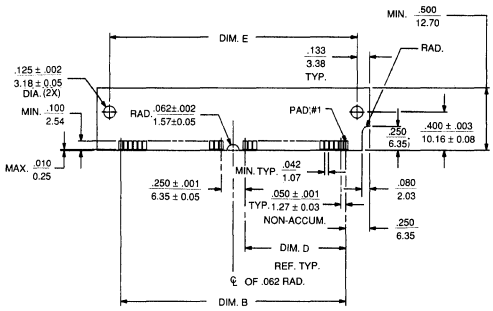
Terminal: Phosphor Bronze Alloy

Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

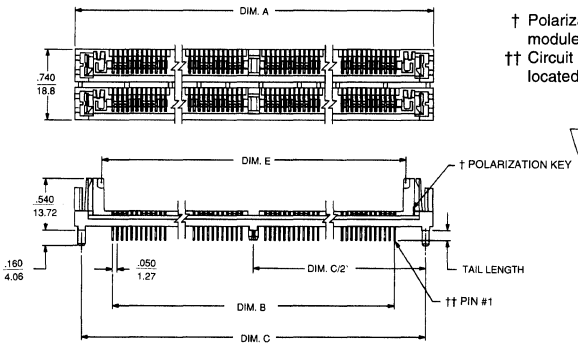
- or -

Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

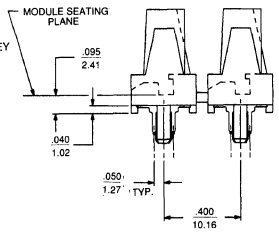
Product Specification: PS 78954



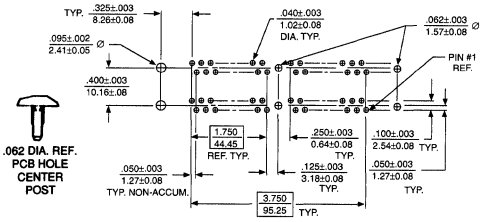
"SIMM" P.C. Board Layout



† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.



END VIEW



Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

Ordering Information

No. of Pos.	Order No. Tin Plate		Order No. Gold Plate		Tail Length	Dimensions				
	WITH Center Post	WITHOUT Center Post	WITH Center Post	WITHOUT Center Post		A	B	C	D	E
38	—	—	—	—	.110	2.85 (72.4)	2.05 (52.1)	2.70 (68.6)	.90 (22.86)	2.28 (58.01)
38	—	—	—	—	.125	2.85 (72.4)	2.05 (52.1)	2.70 (68.6)	.90 (22.86)	2.28 (58.01)
40	—	—	—	—	.110	2.95 (74.9)	2.15 (54.6)	2.80 (71.1)	.95 (24.13)	2.38 (60.55)
40	—	—	—	—	.125	2.95 (74.9)	2.15 (54.6)	2.80 (71.1)	.95 (24.13)	2.38 (60.55)
64	—	—	—	—	.110	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
64	—	—	—	—	.125	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
68	—	—	—	—	.110	4.35 (110.5)	3.55 (90.2)	4.20 (106.7)	1.65 (41.91)	3.78 (96.11)
68	—	—	—	—	.125	4.35 (110.5)	3.55 (90.2)	4.20 (106.7)	1.65 (41.91)	3.78 (96.11)
72	•15-82-0703	—	—	—	.110	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
72	—	—	—	—	.125	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
80	—	—	—	—	.110	4.95 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)
80	15-82-0707	—	—	—	.125	4.95 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)
100	—	—	—	—	.110	5.95 (151.1)	5.15 (130.8)	5.80 (147.3)	2.45 (62.23)	5.38 (136.8)
100	15-82-0706	—	—	—	.125	5.95 (151.1)	5.15 (130.8)	5.80 (147.3)	2.45 (62.23)	5.38 (136.8)

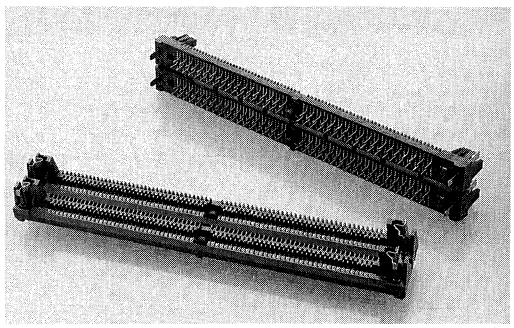
Contact local Molex sales office for assistance or options

• U.S. Standard Product, available through Molex franchised distributors.

SIMM Socket
Vertical (Upright), Metal Latch

78954 Series Standard (Left) Polarization

.050" x .400" (1.27) Spacing
Dual Row with Metal Latches
Hi-Temp. Surface Mount Compatible



- ☐ Metal latches eliminate breakage during abuse or misuse of socket
- ☐ Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- ☐ High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- ☐ Guaranteed two points of contact per read-out with the JEDEC standard module
- ☐ High pressure contact system in both tin/lead or gold option for reliable interface
- ☐ Audible click ensures module is properly seated
- ☐ Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- ☐ Polarization posts provide orientation for proper loading of socket into P.C. board
- ☐ Polarization rib properly orients module to socket
- ☐ JEDEC standard dimensions
- ☐ Center retention posts maintain connector to P.C. Board

F

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

Terminal: Phosphor Bronze Alloy

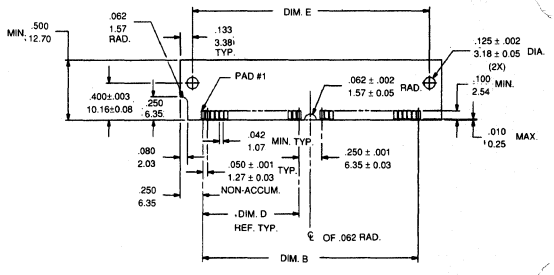
Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

- or -

Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

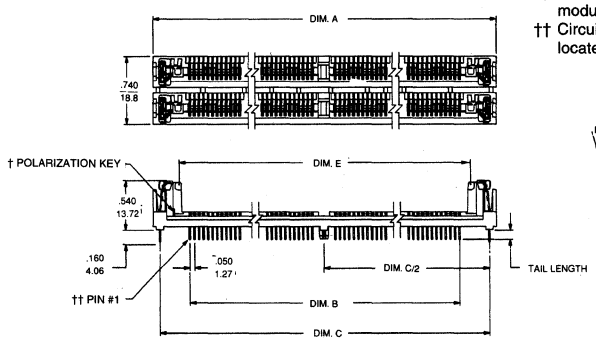
Latch: Stainless steel

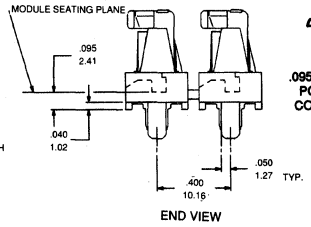
Product Specification: PS 78954

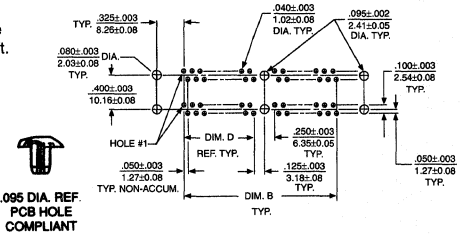


"SIMM" P.C. Board Layout

† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.







.095 DIA. REF. PCB HOLE COMPLIANT

Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

Ordering Information

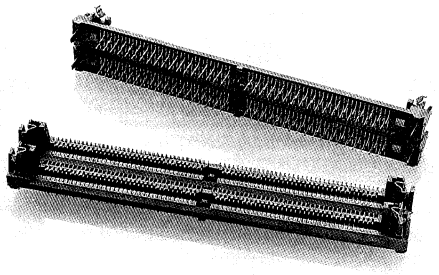
No. of Pos.	Order No. Tin Plate		Order No. Gold Plate		Tail Length	Dimensions				
	WITH Center Post	WITHOUT Center Post	WITH Center Post	WITHOUT Center Post		A	B	C	D	E
38	—	—	—	—	.110	2.85 (72.4)	2.05 (52.1)	2.70 (68.6)	.90 (22.86)	2.28 (58.01)
38	—	—	—	—	.125	2.85 (72.4)	2.05 (52.1)	2.70 (68.6)	.90 (22.86)	2.28 (58.01)
40	—	—	—	—	.110	2.95 (74.9)	2.15 (54.6)	2.80 (71.1)	.95 (24.13)	2.38 (60.55)
40	—	—	—	—	.125	2.95 (74.9)	2.15 (54.6)	2.80 (71.1)	.95 (24.13)	2.38 (60.55)
64	—	—	—	—	.110	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
64	—	—	—	—	.125	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
68	—	—	—	—	.110	4.35 (110.5)	3.55 (90.2)	4.20 (106.7)	1.65 (41.91)	3.78 (96.11)
68	—	—	—	—	.125	4.35 (110.5)	3.55 (90.2)	4.20 (106.7)	1.65 (41.91)	3.78 (96.11)
72	•15-82-0715	—	•15-82-0710	—	.110	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
72	—	—	—	—	.125	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
80	—	—	—	—	.110	4.95 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)
80	—	—	—	—	.125	4.95 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)
100	—	—	—	—	.110	5.95 (151.1)	5.15 (130.8)	5.80 (147.3)	2.45 (62.23)	5.38 (136.8)
100	—	—	—	—	.125	5.95 (151.1)	5.15 (130.8)	5.80 (147.3)	2.45 (62.23)	5.38 (136.8)

Contact local Molex sales office for assistance or options

• U.S. Standard Product, available through Molex franchised distributors.

SIMM Socket
Vertical (Upright), Metal Latch

78954 Series Reverse (Right) Polarization
.050" x .400" (1.27 x 10.16) Spacing
Dual Row with Metal Latches
Hi-Temp. Surface Mount Compatible



- ☐ Metal latches eliminate breakage during abuse or misuse of socket
- ☐ Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- ☐ High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- ☐ Guaranteed two points of contact per read-out with the JEDEC standard module
- ☐ High pressure contact system in both tin/lead or gold option for reliable interface
- ☐ Audible click ensures module is properly seated
- ☐ Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- ☐ Polarization posts provide orientation for proper loading of socket into P.C. board
- ☐ Polarization rib properly orients module to socket
- ☐ Center retention posts maintain connector flush to P.C. Board
- ☐ JEDEC standard dimensions

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

Terminal: Phosphor Bronze Alloy

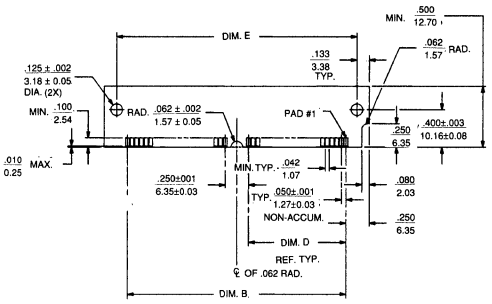
Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

- or -

Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

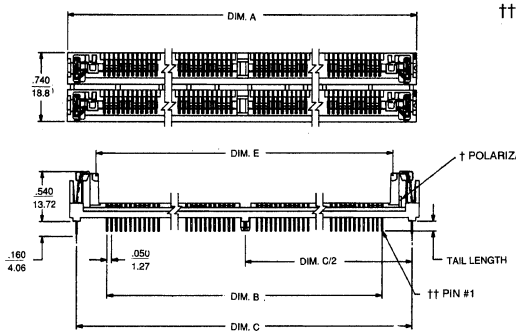
Latch: Stainless steel

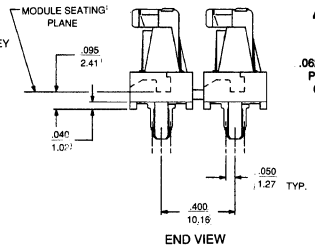
Product Specification: PS 78954



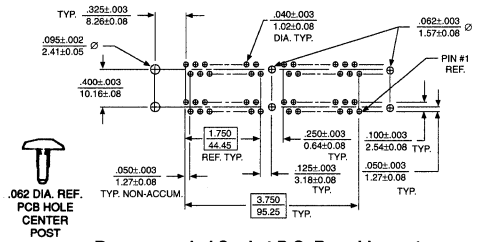
"SIMM" P.C. Board Layout

† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.





END VIEW



Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

Ordering Information

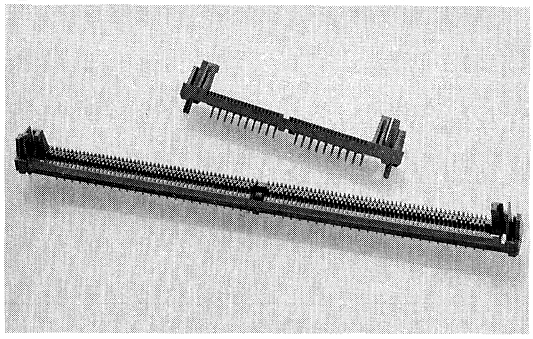
No. of Pos.	Order No. Tin Plate		Order No. Gold Plate		Tail Length	Dimensions				
	WITH Center Post	WITHOUT Center Post	WITH Center Post	WITHOUT Center Post		A	B	C	D	E
38	—	—	—	—	.110	2.85 (72.4)	2.05 (52.1)	2.70 (68.6)	.90 (22.86)	2.28 (58.01)
38	—	—	—	—	.125	2.85 (72.4)	2.05 (52.1)	2.70 (68.6)	.90 (22.86)	2.28 (58.01)
40	—	—	—	—	.110	2.95 (74.9)	2.15 (54.6)	2.80 (71.1)	.95 (24.13)	2.38 (60.55)
40	—	—	—	—	.125	2.95 (74.9)	2.15 (54.6)	2.80 (71.1)	.95 (24.13)	2.38 (60.55)
64	—	—	—	—	.110	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
64	—	15-82-1703	—	—	.125	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
68	—	—	—	—	.110	4.35 (110.5)	3.55 (90.2)	4.20 (106.7)	1.65 (41.91)	3.78 (96.11)
68	—	15-82-1707	—	—	.125	4.35 (110.5)	3.55 (90.2)	4.20 (106.7)	1.65 (41.91)	3.78 (96.11)
72	•15-82-0716	15-82-0717	—	—	.110	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
72	—	—	—	—	.125	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
80	—	—	—	—	.110	4.95 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)
80	15-82-0711	—	15-82-0712	—	.125	4.95 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)
100	—	—	—	—	.110	5.95 (151.1)	5.15 (130.8)	5.80 (147.3)	2.45 (62.23)	5.38 (136.8)
100	—	—	—	—	.125	5.95 (151.1)	5.15 (130.8)	5.80 (147.3)	2.45 (62.23)	5.38 (136.8)

Contact local Molex sales office for assistance or options

• U.S. Standard Product, available through Molex franchised distributors.

SIMM Socket
Vertical (Upright), Plastic Latch

78962 Series Standard (Left) Polarization
.050" (1.27) Spacing
Single Row with Plastic Latches
Hi-Temp. Surface Mount Compatible



- Specially designed plastic latch with anti-overstress feature
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- Guaranteed two points of contact per read-out with the JEDEC standard module
- High pressure contact system in both tin/lead or gold option for reliable interface
- Audible click ensure module is properly seated
- Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- Polarization posts provide orientation for proper loading of socket into P.C. board
- Polarization rib properly orients module to socket
- Center retention posts maintain connector flush to P.C. board
- JEDEC standard dimensions

F

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

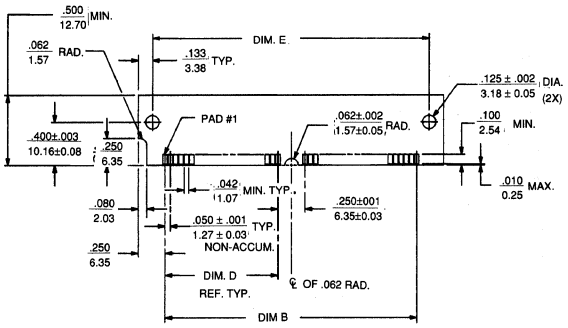
Terminal: Phosphor Bronze Alloy

Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

- or -

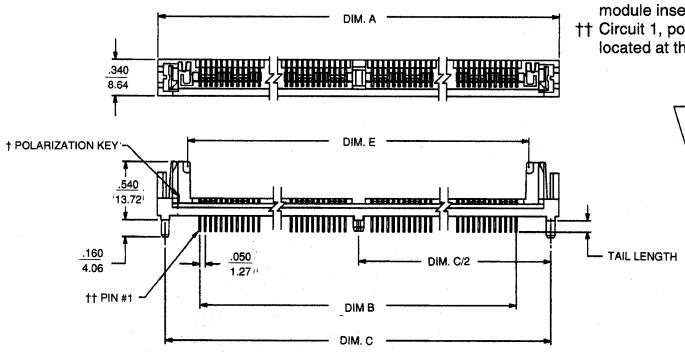
Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

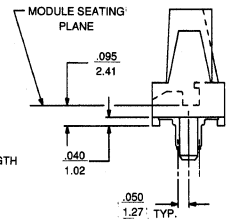
Product Specification: PS 78959



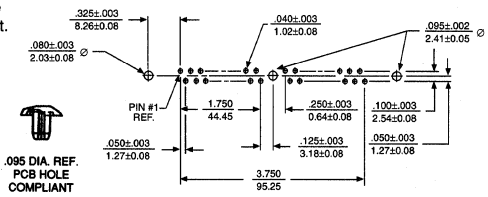
"SIMM" P.C. Board Layout

† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.





END VIEW



Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

Ordering Information

No. of Pos.	Order No. Tin Plate		Order No. Gold Plate		Tail Length	Dimensions				
	WITH Center Post	WITHOUT Center Post	WITH Center Post	WITHOUT Center Post		A	B	C	D	E
38	—	—	—	—	.110	2.85 (72.4)	2.05 (52.1)	2.70 (68.6)	.90 (22.86)	2.28 (58.01)
38	—	—	—	—	.125	2.85 (72.4)	2.05 (52.1)	2.70 (68.6)	.90 (22.86)	2.28 (58.01)
40	—	15-82-0749	—	15-82-0795	.110	2.95 (74.9)	2.15 (54.6)	2.80 (71.1)	.95 (24.13)	2.38 (60.55)
40	—	—	—	—	.125	2.95 (74.9)	2.15 (54.6)	2.80 (71.1)	.95 (24.13)	2.38 (60.55)
64	•15-82-0799	—	•15-82-0753	—	.110	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
64	—	—	—	—	.125	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
68	•15-82-0754	—	—	—	.110	4.35 (110.5)	3.55 (90.2)	4.20 (106.7)	1.65 (41.91)	3.78 (96.11)
68	—	—	—	—	.125	4.35 (110.5)	3.55 (90.2)	4.20 (106.7)	1.65 (41.91)	3.78 (96.11)
72	•15-82-0741	—	•15-82-0742	—	.110	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
72	15-82-1110	—	—	—	.125	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
80	•15-82-0744	—	•15-82-0740	—	.110	4.95 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)
80	15-82-0758	—	—	15-82-0766	.125	4.95 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)
100	—	15-82-0746	—	—	.110	5.95 (151.1)	5.15 (130.8)	5.80 (147.3)	2.45 (62.23)	5.38 (136.8)
100	—	—	—	—	.125	5.95 (151.1)	5.15 (130.8)	5.80 (147.3)	2.45 (62.23)	5.38 (136.8)

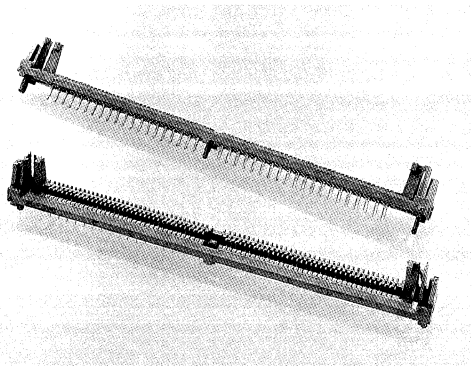
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SIMM Socket
Vertical (Upright), Plastic Latch

78962 Series Reverse (Right) Polarization

.050" (1.27) Spacing
Single Row with Plastic Latches
Hi-Temp. Surface Mount Compatible



- ☐ Specially designed plastic latch with anti-overstress feature
- ☐ Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- ☐ High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- ☐ Guaranteed two points of contact per read-out with the JEDEC standard module
- ☐ High pressure contact system in both tin/lead or gold option for reliable interface
- ☐ Audible click ensures module is properly seated
- ☐ Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- ☐ Polarization posts provide orientation for proper loading of socket into P.C. board
- ☐ Polarization rib properly orients module to socket
- ☐ Center retention posts maintain connector flush to P.C. Board
- ☐ JEDEC standard dimensions

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

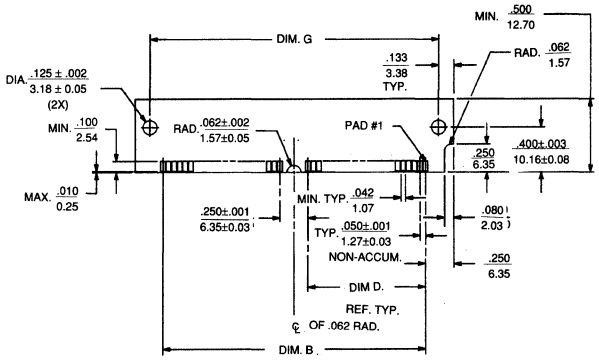
Terminal: Phosphor Bronze Alloy

Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

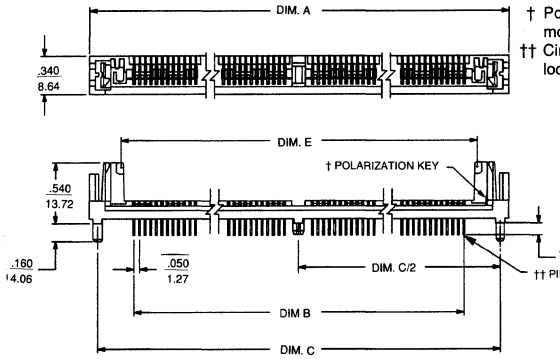
- or -

Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

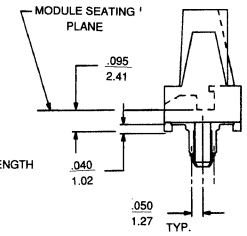
Product Specification: PS 78959



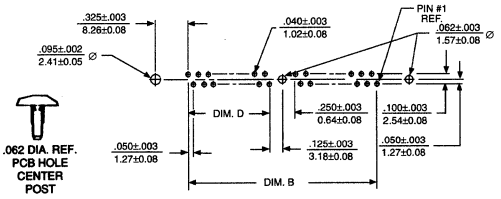
"SIMM" P.C. Board Layout



† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.



END VIEW



Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

Ordering Information

No. of Pos.	Order No. Tin Plate		Order No. Gold Plate		Tail Length	Dimensions				
	WITH Center Post	WITHOUT Center Post	WITH Center Post	WITHOUT Center Post		A	B	C	D	E
38	—	—	—	—	.110	2.85 (72.4)	2.05 (52.1)	2.70 (68.6)	.90 (22.86)	2.28 (58.01)
38	—	—	—	—	.125	2.85 (72.4)	2.05 (52.1)	2.70 (68.6)	.90 (22.86)	2.28 (58.01)
40	—	15-82-0796	—	15-82-0773	.110	2.95 (74.9)	2.15 (54.6)	2.80 (71.1)	.95 (24.13)	2.38 (60.55)
40	—	—	—	—	.125	2.95 (74.9)	2.15 (54.6)	2.80 (71.1)	.95 (24.13)	2.38 (60.55)
64	—	—	•15-82-0763	—	.110	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
64	—	15-82-0752	—	—	.125	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
68	—	—	—	—	.110	4.35 (110.5)	3.55 (90.2)	4.20 (106.7)	1.65 (41.91)	3.78 (96.11)
68	—	—	—	—	.125	4.35 (110.5)	3.55 (90.2)	4.20 (106.7)	1.65 (41.91)	3.78 (96.11)
72	•15-82-0743	—	•15-82-0789	—	.110	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
72	—	—	—	—	.125	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
80	—	—	15-82-0767	—	.110	4.95 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)
80	15-82-0751	—	15-82-0760	—	.125	4.95 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)
100	—	—	—	—	.110	5.95 (151.1)	5.15 (130.8)	5.80 (147.3)	2.45 (62.23)	5.38 (136.8)
100	15-82-0750	—	—	—	.125	5.95 (151.1)	5.15 (130.8)	5.80 (147.3)	2.45 (62.23)	5.38 (136.8)

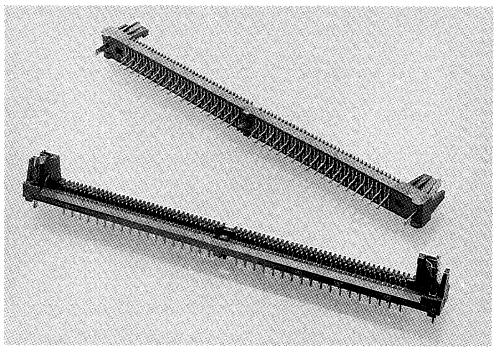
Contact local Molex sales office for assistance or options

• U.S. Standard Product, available through Molex franchised distributors.

SIMM Socket
Vertical (Upright), Metal Latch

78962 Series Standard (Left) Polarization

.050" (1.27) Spacing
Single Row with Metal Latches
Hi-Temp. Surface Mount Compatible



- Metal latches eliminate breakage during abuse or misuse of socket
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- Guaranteed two points of contact per read-out with the JEDEC standard module
- High pressure contact system in both tin/lead or gold option for reliable interface
- Audible click ensures module is properly seated
- Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- Polarization posts provide orientation for proper loading of socket into P.C. board
- Polarization rib properly orients module to socket
- Center retention posts maintain connector flush to P.C. board
- JEDEC standard dimensions

F

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

Terminal: Phosphor Bronze Alloy

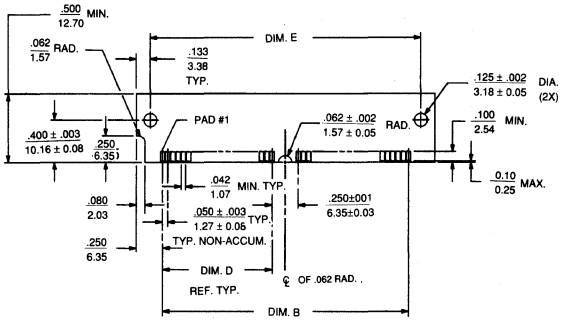
Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

- or -

Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

Latch: Stainless steel

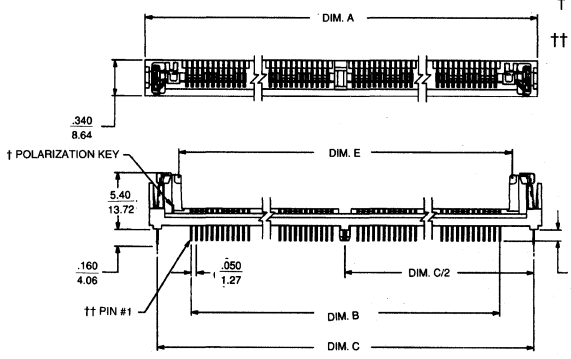
Product Specification: PS 78954

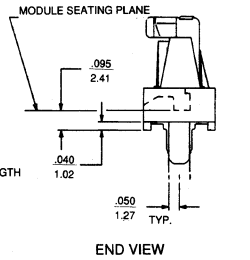


"SIMM" P.C. Board Layout

† Polarization key location as viewed from module insertion side of SIMM socket.

†† Circuit 1, polarization key and small post are located at the same end, whether right or left.

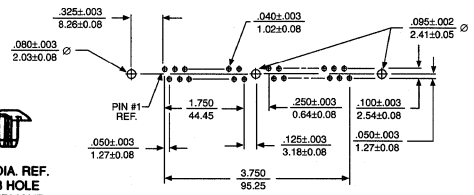




END VIEW



.095 DIA. REF. PCB HOLE COMPLIANT



Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

Ordering Information

No. of Pos.	Order No. Tin Plate		Order No. Gold Plate		Tail Length	Dimensions				
	WITH Center Post	WITHOUT Center Post	WITH Center Post	WITHOUT Center Post		A	B	C	D	E
38	15-82-1102	—	—	—	.110	2.85 (72.4)	2.05 (52.1)	2.70 (68.6)	.90 (22.86)	2.28 (58.01)
38	—	—	—	—	.125	2.85 (72.4)	2.05 (52.1)	2.70 (68.6)	.90 (22.86)	2.28 (58.01)
40	15-82-1103	15-82-0798	—	—	.110	2.95 (74.9)	2.15 (54.6)	2.80 (71.1)	.95 (24.13)	2.38 (60.55)
40	—	—	—	—	.125	2.95 (74.9)	2.15 (54.6)	2.80 (71.1)	.95 (24.13)	2.38 (60.55)
64	•15-82-1104	—	•15-82-0739	—	.110	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
64	—	—	—	—	.125	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
68	•15-82-1105	—	—	—	.110	4.35 (110.5)	3.55 (90.2)	4.20 (106.7)	1.65 (41.91)	3.78 (96.11)
68	—	—	—	—	.125	4.35 (110.5)	3.55 (90.2)	4.20 (106.7)	1.65 (41.91)	3.78 (96.11)
72	•15-82-0775	—	•15-82-0762	—	.110	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
72	15-82-1106	—	15-82-1132	—	.125	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
80	•15-82-1117	—	•15-82-0780	—	.110	4.95 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)
80	15-82-0778	—	15-82-1115	—	.125	4.95 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)
100	—	15-82-0746	—	—	.110	5.95 (151.1)	5.15 (130.8)	5.80 (147.3)	2.45 (62.23)	5.38 (136.8)
100	—	—	—	—	.125	5.95 (151.1)	5.15 (130.8)	5.80 (147.3)	2.45 (62.23)	5.38 (136.8)

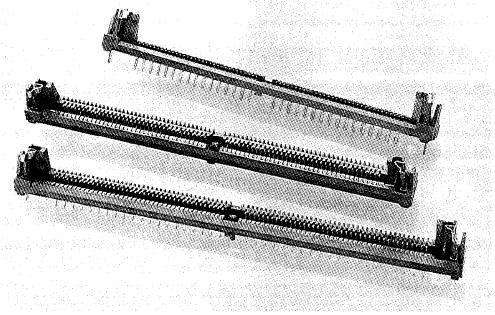
Contact local Molex sales office for assistance or options

• U.S. Standard Product, available through Molex franchised distributors.

SIMM Socket
Vertical (Upright), Metal Latch

78962 Series Reverse (Right) Polarization

.050" (1.27) Spacing
Single Row with Metal Latches
Hi-Temp. Surface Mount Compatible



- Metal latches eliminate breakage during abuse or misuse of socket
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- Guaranteed two points of contact per read-out with the JEDEC standard module
- High pressure contact system in both tin/lead or gold option for reliable interface
- Audible click ensures module is properly seated
- Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- Polarization posts provide orientation for proper loading of socket into P.C. board
- Polarization rib properly orients module to socket
- Center retention posts maintain connector flush to P.C. board
- JEDEC standard dimensions

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

Terminal: Phosphor Bronze Alloy

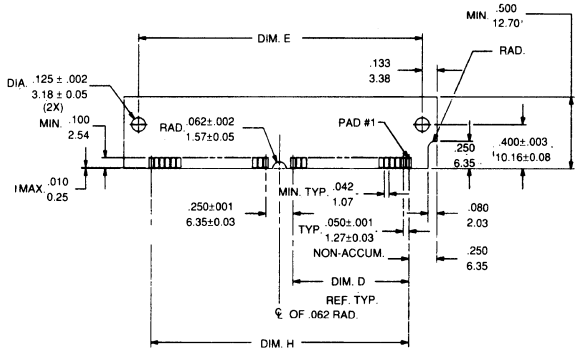
Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

- or -

Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

Latch: Stainless steel

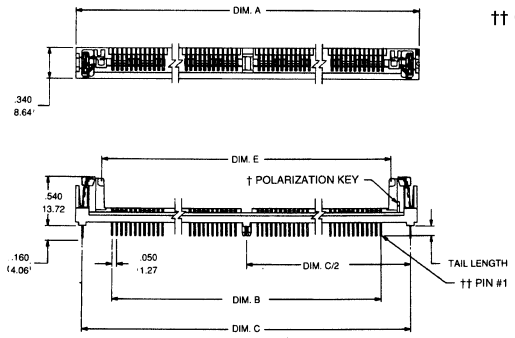
Product Specification: PS 78954

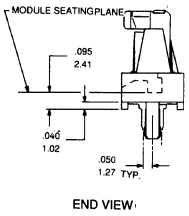


"SIMM" P.C. Board Layout

† Polarization key location as viewed from module insertion side of SIMM socket.

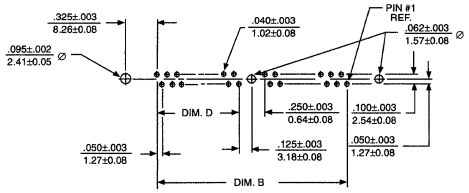
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.





END VIEW





Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

Ordering Information

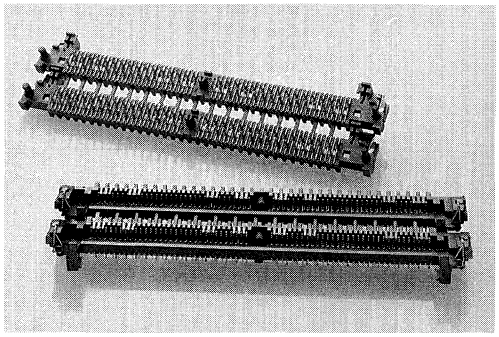
No. of Pos.	Order No. Tin Plate		Order No. Gold Plate		Tail Length	Dimensions				
	WITH Center Post	WITHOUT Center Post	WITH Center Post	WITHOUT Center Post		A	B	C	D	E
38	—	—	—	—	.110	2.85 (72.4)	2.05 (52.1)	2.70 (68.6)	.90 (22.86)	2.28 (58.01)
38	—	—	—	—	.125	2.85 (72.4)	2.05 (52.1)	2.70 (68.6)	.90 (22.86)	2.28 (58.01)
40	—	15-82-0782	—	—	.110	2.95 (74.9)	2.15 (54.6)	2.80 (71.1)	.95 (24.13)	2.38 (60.55)
40	—	15-82-1112	—	—	.125	2.95 (74.9)	2.15 (54.6)	2.80 (71.1)	.95 (24.13)	2.38 (60.55)
64	—	—	•15-82-0763	15-82-0791	.110	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
64	—	15-82-1125	—	—	.125	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
68	—	—	—	—	.110	4.35 (110.5)	3.55 (90.2)	4.20 (106.7)	1.65 (41.91)	3.78 (96.11)
68	—	15-82-1123	—	—	.125	4.35 (110.5)	3.55 (90.2)	4.20 (106.7)	1.65 (41.91)	3.78 (96.11)
72	•15-82-0777	15-82-0772	•15-82-0788	15-82-0794	.110	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
72	—	—	15-82-0784	—	.125	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
80	—	—	—	—	.110	4.95 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)
80	15-82-0770	—	15-82-0771	—	.125	4.95 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)
100	—	—	—	—	.110	5.95 (151.1)	5.15 (130.8)	5.80 (147.3)	2.45 (62.23)	5.38 (136.8)
100	15-82-0783	—	—	—	.125	5.95 (151.1)	5.15 (130.8)	5.80 (147.3)	2.45 (62.23)	5.38 (136.8)

Contact local Molex sales office for assistance or options

• U.S. Standard product, available through Molex franchised distributors.

SIMM Socket
Low Profile (22.5°), Plastic Latch

78955 Series Standard (Left) Polarization
.050" x .500" (1.27 x 12.70) Spacing
Dual Row with Plastic Latches
Hi-Temp. Surface Mount Compatible



- Specially designed plastic latch with anti-overstress feature
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- Guaranteed two points of contact per read-out with the JEDEC standard module
- High pressure contact system in both tin/lead or gold option for reliable interface
- Audible click ensures module is properly seated
- Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- Polarization posts provide orientation for proper loading of socket into P.C. board
- Center retention posts maintain connector flush to P.C. board
- Polarization rib properly orients module to socket
- JEDEC standard dimensions

F

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

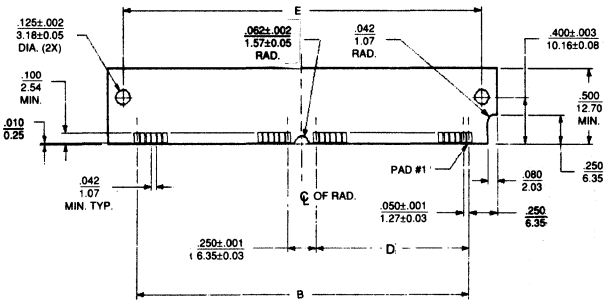
Terminal: Phosphor Bronze Alloy

Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

- or -

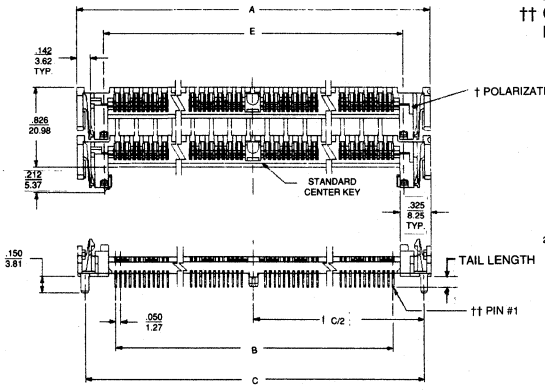
Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

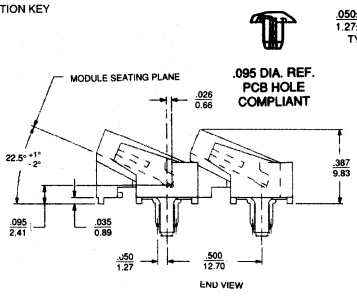
Product Specification: PS 78955

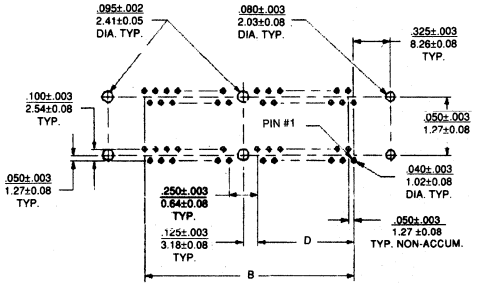


"SIMM" P.C. Board Layout

† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.







Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

Ordering Information

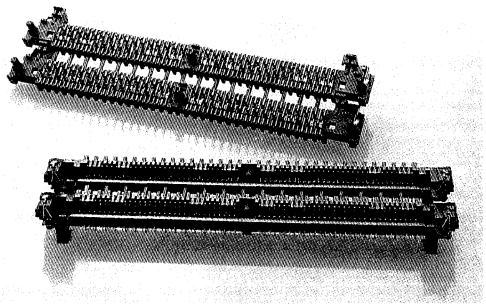
No. of Pos.	Order No. Tin Plate		Order No. Gold Plate		Tail Length	Dimensions				
	WITH Center Post	WITHOUT Center Post	WITH Center Post	WITHOUT Center Post		A	B	C	D	E
40	—	—	—	—	.110"	2.95 (74.93)	2.15 (54.61)	2.80 (71.12)	.95 (24.13)	2.38 (60.55)
56	—	—	15-82-0725	—	.110"	3.75 (95.3)	2.95 (74.9)	3.60 (91.4)	1.35 (34.29)	3.18 (80.87)
60	15-82-0719	—	—	—	.110"	3.95 (100.3)	3.15 (80.0)	3.80 (96.52)	1.45 (36.83)	3.38 (85.95)
64	•15-82-0720	—	—	—	.110"	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
64	—	—	—	—	.125"	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
68	•15-82-0724	—	—	—	.110"	4.35 (110.5)	3.55 (90.2)	4.20 (106.7)	1.65 (41.91)	3.78 (96.11)
72	•15-82-0721	—	•15-82-0722	—	.110"	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
72	15-82-0729	—	—	—	.125"	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
80	15-82-0723	—	—	—	.110"	4.95 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)
80	—	—	—	—	.125"	4.95 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)

Contact local Molex sales office for assistance or options

• U.S. Standard Products, available through Molex franchised distributors.

SIMM Socket
Low Profile (22.5°), Metal Latch

78955 Series Standard (Left) Polarization
.050" x .500" (1.27 x 12.70) Spacing
Dual Row with Metal Latches
Hi-Temp. Surface Mount Compatible



- Metal latches eliminate breakage during abuse or misuse of socket
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- Guaranteed two points of contact per read-out with the JEDEC standard module
- High pressure contact system in both tin/lead or gold option for reliable interface
- Audible click ensures module is properly seated
- Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- Polarization posts provide orientation for proper loading of socket into P.C. board
- Polarization rib properly orients module to socket
- Center retention posts maintain connector flush to P.C. board
- JEDEC standard dimensions

F

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

Terminal: Phosphor Bronze Alloy

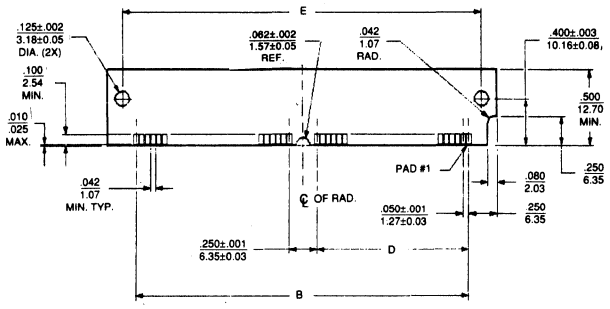
Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

- or -

Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

Latch: Stainless Steel

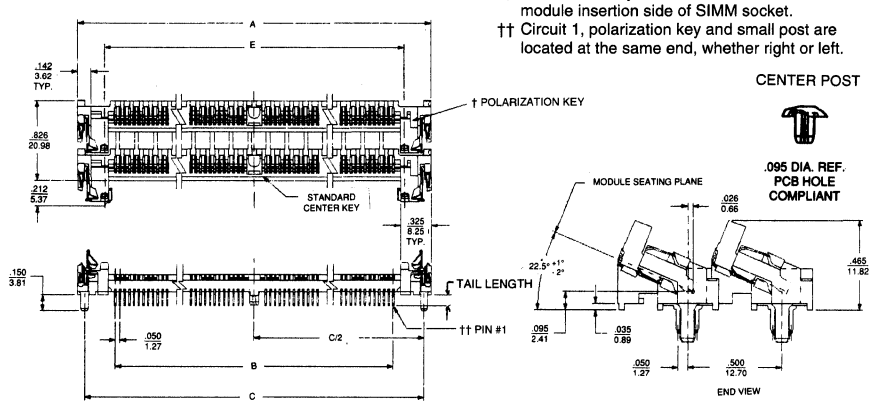
Product Specification: PS 78955

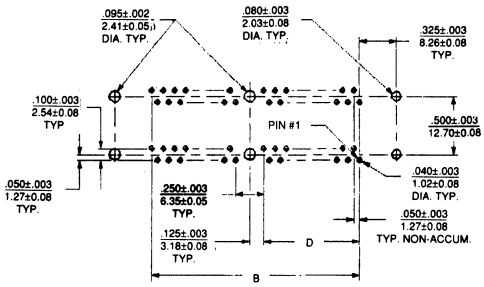


"SIMM" P.C. Board Layout

† Polarization key location as viewed from module insertion side of SIMM socket.

†† Circuit 1, polarization key and small post are located at the same end, whether right or left.





Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

Ordering Information

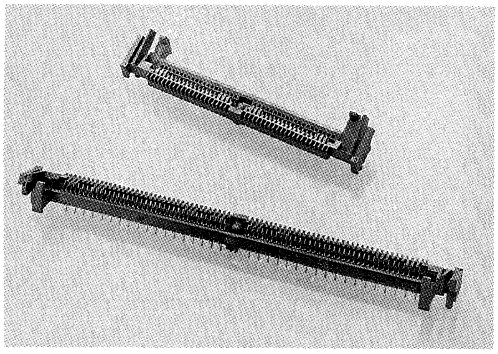
No. of Pos.	Order No. Tin Plate		Order No. Gold Plate		Tail Length	Dimensions				
	WITH Center Post	WITHOUT Center Post	WITH Center Post	WITHOUT Center Post		A	B	C	D	E
40	—	—	—	—	.110"	2.95 (74.93)	2.15 (54.61)	2.80 (71.12)	.95 (24.13)	2.38 (60.55)
56	—	—	—	—	.110"	3.75 (95.3)	2.95 (74.9)	3.60 (91.4)	1.35 (34.29)	3.18 (80.87)
60	—	—	—	—	.110"	3.95 (100.3)	3.15 (80.0)	3.80 (96.52)	1.45 (36.83)	3.38 (85.95)
64	—	—	—	—	.110"	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
64	—	—	—	—	.125"	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
68	—	—	—	—	.110"	4.35 (110.5)	3.55 (90.2)	4.20 (106.7)	1.65 (41.91)	3.78 (96.11)
72	•15-82-0726	—	•15-82-0727	—	.110"	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
72	—	—	—	—	.125"	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
80	—	—	—	—	.110"	4.95 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)
80	—	—	—	—	.125"	4.95 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)

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• U.S. Standard Product, available through Molex franchised distributors.

SIMM Socket
Low Profile (22.5°), Plastic Latch

78964 Series Standard (Left) Polarization
.050" x .500" (1.27 x 12.70) Spacing
Single Row with Plastic Latch
Hi-Temp. Surface Mount Compatible



- Specially designed plastic latch with anti-overstress feature
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- Guaranteed two points of contact per read-out with the JEDEC standard module
- High pressure contact system in both tin/lead or gold option for reliable interface
- Audible click ensures module is properly seated
- Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- Polarization posts provide orientation for proper loading of socket into P.C. board
- Polarization rib properly orients module to socket
- Center retention posts maintain connector flush to P.C. board
- JEDEC standard dimensions
- Consult factory for minimum connector to connector center spacing

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

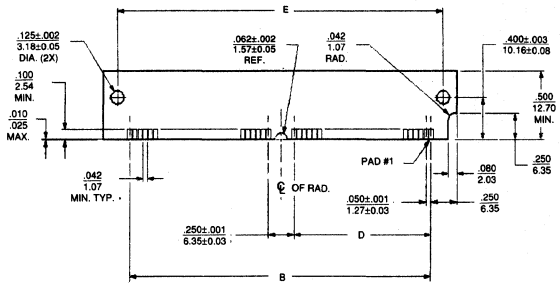
Terminal: Phosphor Bronze Alloy

Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

- or -

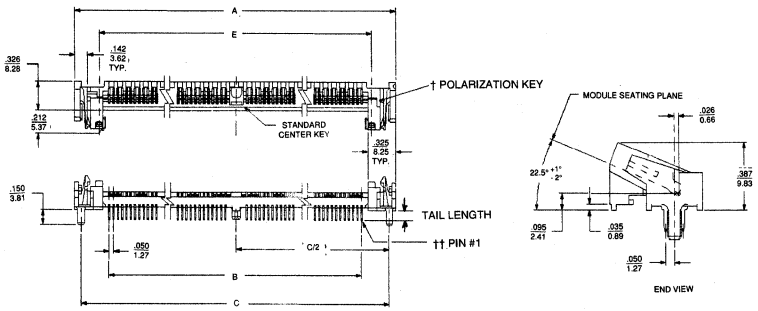
Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

Product Specification: PS 78955



"SIMM" P.C. Board Layout

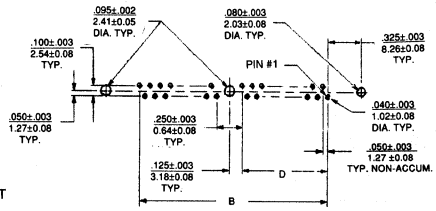
† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.



CENTER POST



.095 DIA. REF. PCB HOLE COMPLIANT



Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

Ordering Information

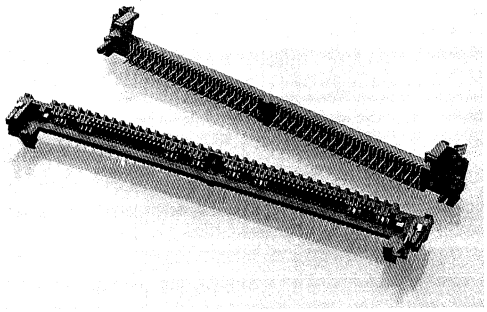
No. of Pos.	Order No. Tin Plate		Order No. Gold Plate		Tail Length	Dimensions				
	WITH Center Post	WITHOUT Center Post	WITH Center Post	WITHOUT Center Post		A	B	C	D	E
40	—	15-82-0650	—	15-82-0651	.110"	2.95 (74.93)	2.15 (54.61)	2.80 (71.12)	.95 (24.13)	2.38 (60.55)
56	—	—	15-82-5602	—	.110"	3.75 (95.3)	2.95 (74.9)	3.60 (91.4)	1.35 (34.29)	3.18 (80.87)
60	15-82-0660	—	—	—	.110"	3.95 (100.3)	3.15 (80.0)	3.80 (96.52)	1.45 (36.83)	3.38 (85.95)
64	•15-82-0664	—	•15-82-0661	—	.110"	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
64	—	—	—	—	.125"	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
68	•15-82-0668	—	—	—	.110"	4.35 (110.5)	3.55 (90.2)	4.20 (106.7)	1.65 (41.91)	3.78 (96.11)
72	•15-82-0671	—	•15-82-0672	—	.110"	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
72	15-82-0670	—	—	—	.125"	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
80	•15-82-0680	—	•15-82-0681	—	.110"	4.95 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)
80	—	—	—	—	.125"	4.95 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)

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• U.S. Standard Product, available through Molex franchised distributors.

SIMM Socket
Low Profile (22.5°), Metal Latch

78964 Series Standard (Left) Polarization
.050" x .500" (1.27 x 12.70) Spacing
Single Row with Metal Latches
Hi-Temp. Surface Mount Compatible



- Metal latches eliminate breakage during abuse or misuse of socket
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- Guaranteed two points of contact per read-out with the JEDEC standard module
- High pressure contact system in both tin/lead or gold option for reliable interface
- Audible click ensures module is properly seated
- Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- Polarization posts provide orientation for proper loading of socket into P.C. board
- Polarization rib properly orients module to socket
- Center retention posts maintain connector flush to P.C. board
- JEDEC standard dimensions
- Consult factory for center spacing

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

Terminal: Phosphor Bronze Alloy

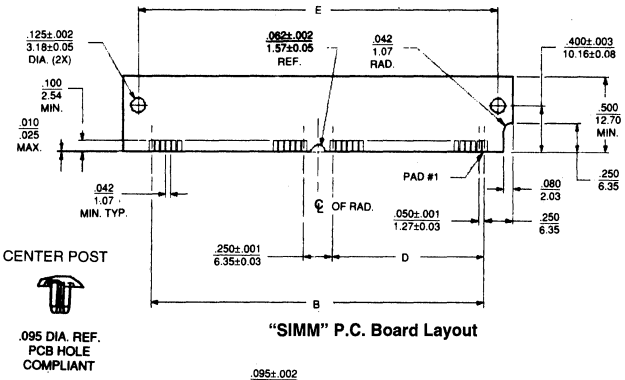
Plating: Post Plate 200µ" min.tin/lead over 50µ" min. nickel overall

- or -

Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

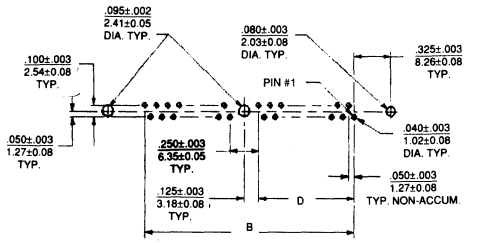
Latch: Stainless steel

Product Specification: PS 78955

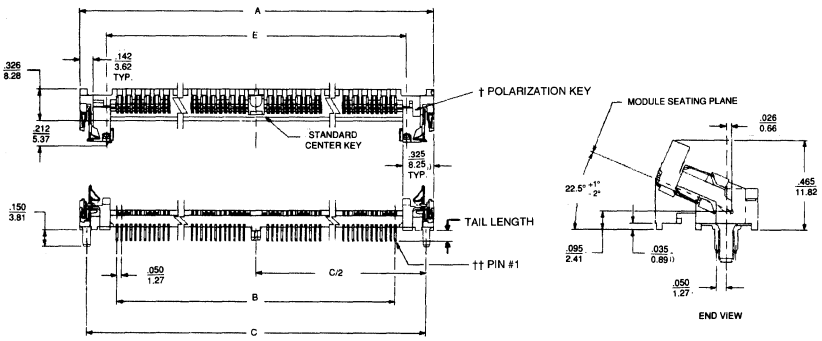


"SIMM" P.C. Board Layout

† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.



Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)



Ordering Information

No. of Pos.	Order No. Tin Plate		Order No. Gold Plate		Tail Length	Dimensions				
	WITH Center Post	WITHOUT Center Post	WITH Center Post	WITHOUT Center Post		A	B	C	D	E
40	—	15-82-0653	—	15-82-0654	.110"	2.95 (74.93)	2.15 (54.61)	2.80 (71.12)	.95 (24.13)	2.38 (60.55)
56	—	—	15-82-0658	—	.110"	3.75 (95.3)	2.95 (74.9)	3.60 (91.4)	1.35 (34.29)	3.18 (80.87)
60	—	—	—	—	.110"	3.95 (100.3)	3.15 (80.0)	3.80 (96.52)	1.45 (36.83)	3.38 (85.95)
64	•15-82-0667	—	—	—	.110"	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
64	—				.125"	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
68	•15-82-0693	15-82-0689	—	—	.110"	4.35 (110.5)	3.55 (90.2)	4.20 (106.7)	1.65 (41.91)	3.78 (96.11)
72	•15-82-0678	—	•15-82-0675	—	.110"	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
72	15-82-0679	—	15-82-0692	—	.125"	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
80	•15-82-0685	—	•15-82-0683	—	.110"	4.95 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)
80	15-82-0684	—	—	—	.125"	4.95 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)

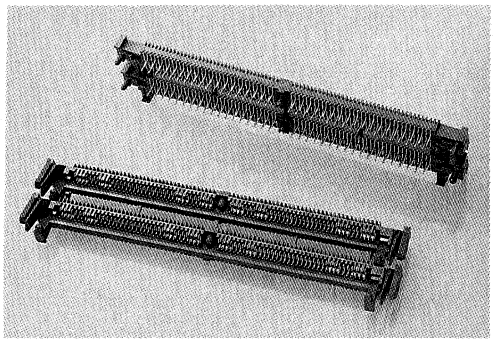
Contact local Molex sales office for assistance or options

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SIMM Socket
Low Profile (40°), Plastic Latch

78977 Series Standard (Left) Polarization

.050" (1.27) Spacing
Dual Row with Plastic Latches
Hi-Temp. Surface Mount Compatible



- Specially designed plastic latch with anti-overstress feature
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- Guaranteed two points of contact per read-out with the JEDEC standard module
- High pressure contact system in both tin/lead or gold option for reliable interface
- Audible click ensures module is properly seated
- Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- Polarization posts provide orientation for proper loading of socket into P.C. board
- Polarization rib properly orients module to socket
- Center retention posts maintain connector flush to P.C. board
- JEDEC standard dimensions

F

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

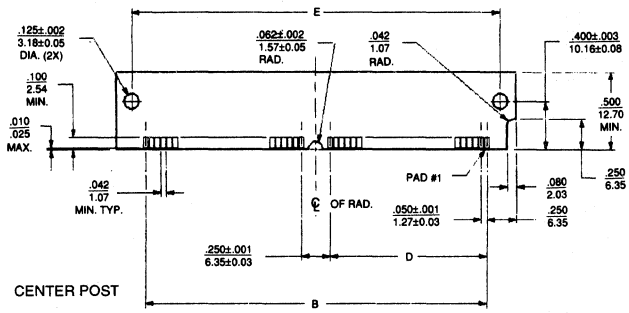
Terminal: Phosphor Bronze Alloy

Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

- or -

Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

Product Specification: PS 78977

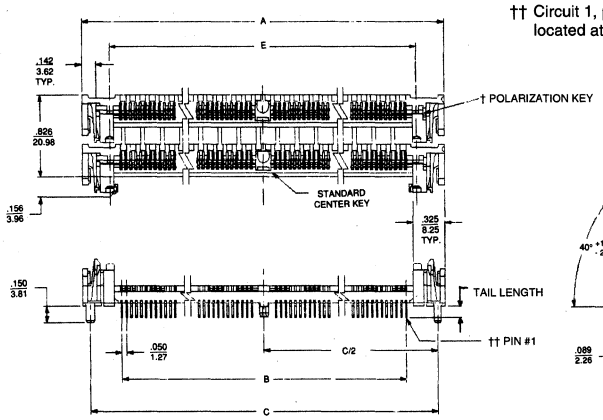


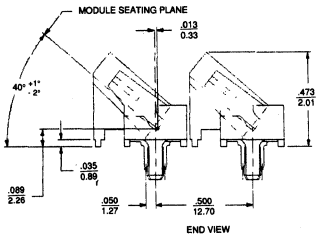
"SIMM" P.C. Board Layout

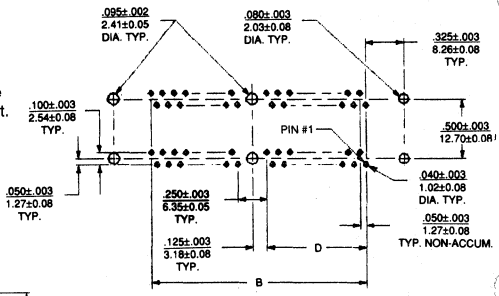
.095 DIA. REF.
PCB HOLE
COMPLIANT

† Polarization key location as viewed from module insertion side of SIMM socket.

†† Circuit 1, polarization key and small post are located at the same end, whether right or left.







Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

Ordering Information

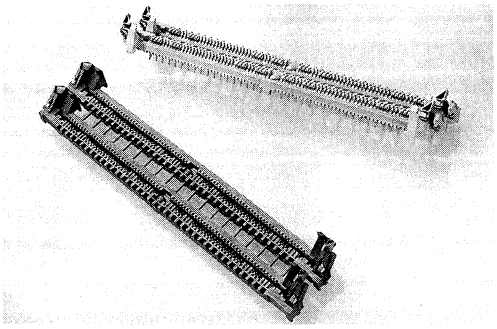
No. of Pos.	Order No. Tin Plate WITH Center Post	Order No. Tin Plate WITHOUT Center Post	Order No. Gold Plate WITH Center Post	Order No. Gold Plate WITHOUT Center Post	Polarizing Key	Tail Length	Dimensions A	B	C	D	E	Housing Color
72	15-82-0639	—	15-82-0631	—	Low (.125)	.090"	.455 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)	Grey
72	—	—	15-82-0635	—	High (.250)	.090"	.455 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)	Black
72	—	—	—	—	Low (.125)	.110"	.455 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)	Grey
72	—	—	—	—	High (.250)	.110"	.455 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)	Black
72	—	—	—	—	Low (.125)	.140"	.455 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)	Grey
72	—	—	—	—	High (.250)	.140"	.455 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)	Black
80	—	—	—	—	High (.250)	.090"	.495 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)	Black
80	—	—	—	—	Low (.125)	.110"	.495 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)	Grey
80	—	—	—	—	High (.250)	.140"	.495 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)	Black

Contact local Molex sales office for assistance or options

SIMM Socket
Low Profile (40°), Metal Latch

78977 Series Standard (Left) Polarization

.050" (1.27) Spacing
Dual Row with Metal Latches
Hi-Temp. Surface Mount Compatible



- Metal latches eliminate breakage during abuse or misuse of socket
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- Guaranteed two points of contact per read-out with the JEDEC standard module
- High pressure contact system in both tin/lead or gold option for reliable interface
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- Polarization posts provide orientation for proper loading of socket into P.C. board
- Polarization rib properly orients module to socket
- Center retention posts maintain connector flush to P.C. board
- JEDEC standard dimensions

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

Terminal: Phosphor Bronze Alloy

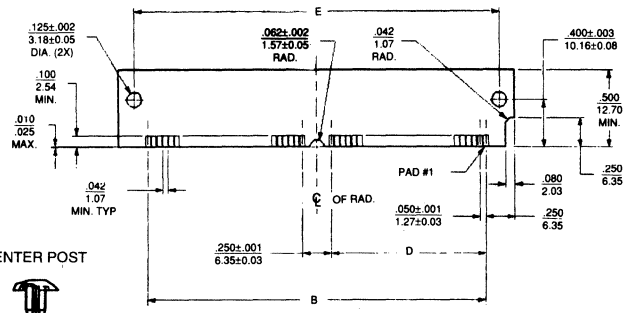
Plating: Post Plate 200µ" min.tin/lead over 50µ" min. nickel overall

- or -

Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

Latch: Stainless steel

Product Specification: PS 78977

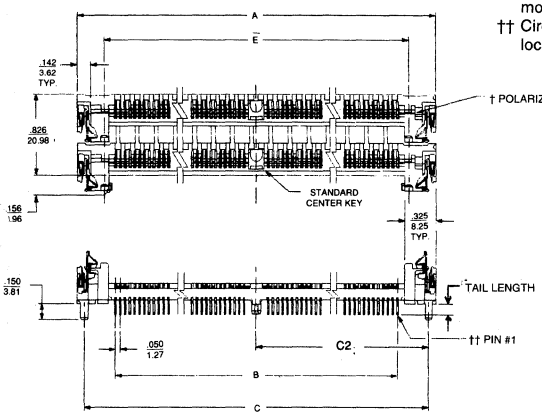


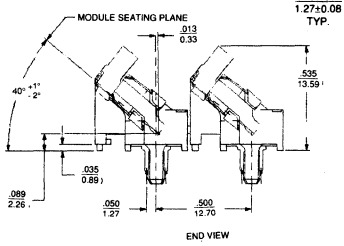
"SIMM" P.C. Board Layout

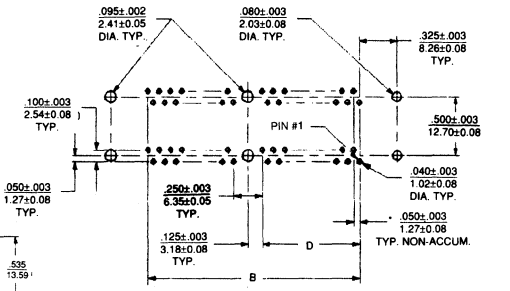
CENTER POST

.095 DIA. REF.
PCB HOLE
COMPLIANT

† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.







Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

Ordering Information

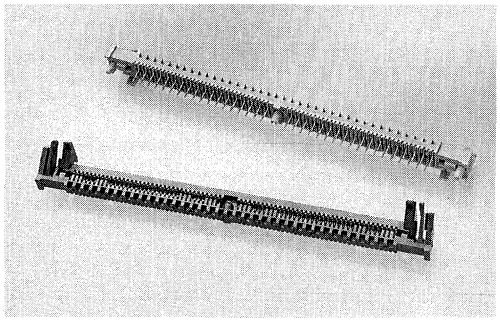
No. of Pos.	Order No. Tin Plate WITH Center Post	Order No. Tin Plate WITHOUT Center Post	Order No. Gold Plate WITH Center Post	Order No. Gold Plate WITHOUT Center Post	Polarizing Key	Tail Length	Dimensions A	B	C	D	E	Housing Color
72	15-82-0637	—	15-82-0633	—	Low (.125)	.090"	.455 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)	Grey
72	—	—	15-82-0632	—	High (.250)	.090"	.455 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)	Black
72	—	—	—	—	Low (.125)	.110"	.455 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)	Grey
72	—	—	15-82-0634	—	High (.250)	.110"	.455 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)	Black
72	—	—	—	—	Low (.125)	.140"	.455 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)	Grey
72	—	—	15-82-0638	—	High (.250)	.140"	.455 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)	Black
80	—	—	—	—	High (.250)	.090"	.495 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)	Black
80	—	—	—	—	Low (.125)	.110"	.495 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)	Grey
80	—	—	—	—	High (.250)	.140"	.495 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)	Black

Contact local Molex sales office for assistance or options

SIMM Socket
Low Profile (40°), Plastic Latch

78976 Series Standard (Left) Polarization

.050" (1.27) Spacing
Single Row with Plastic Latch
Hi-Temp. Surface Mount Compatible



- Specially designed plastic latch with anti-overstress feature
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- Guaranteed two points of contact per read-out with the JEDEC standard module
- High pressure contact system in both tin/lead or gold option for reliable interface
- Audible click ensures module is properly seated
- Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- Polarization posts provide orientation for proper loading of socket into P.C. board
- Polarization rib properly orients module to socket
- Center retention posts maintain connector flush to P.C. board
- JEDEC standard dimensions
- Consult factory for minimum connector-to-connector center spacing

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

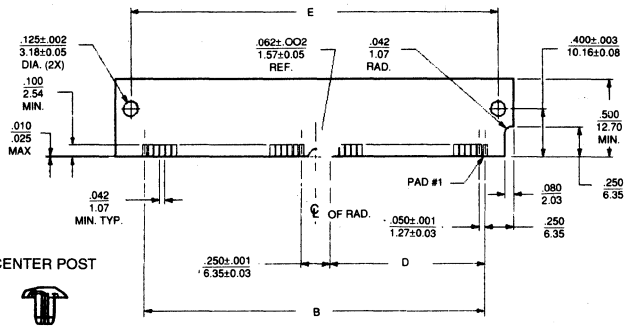
Terminal: Phosphor Bronze Alloy

Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

- or -

Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

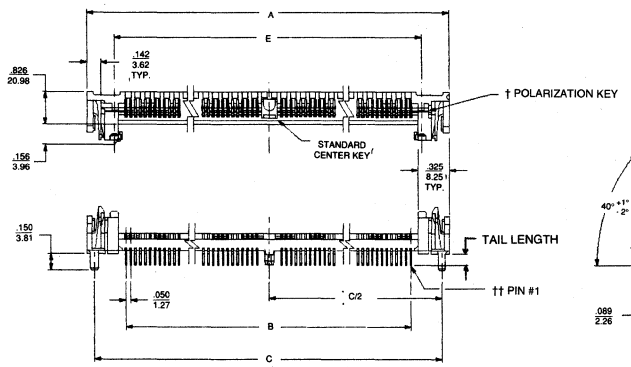
Product Specification: PS 78977

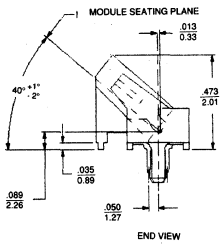


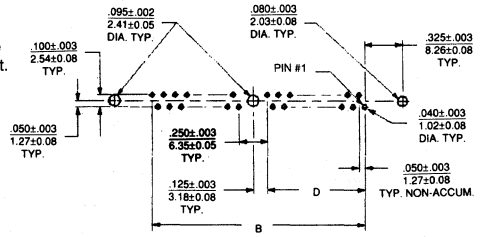
"SIMM" P.C. Board Layout

† Polarization key location as viewed from module insertion side of SIMM socket.

†† Circuit 1, polarization key and small post are located at the same end, whether right or left.







Recommended Socket P.C. Board Layout

(No center hole needed for parts without center post)

Ordering Information

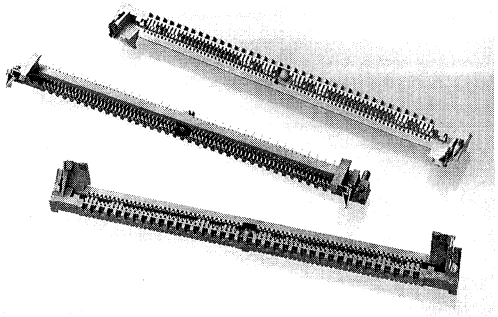
No. of Pos.	Order No. Tin Plate WITH Center Post	Order No. Tin Plate WITHOUT Center Post	Order No. Gold Plate WITH Center Post	Order No. Gold Plate WITHOUT Center Post	Polarizing Key	Tail Length	Dimensions A	B	C	D	E	Housing Color
72	15-82-0618	—	15-82-0630	—	Low (.125)	.090"	.455 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)	Grey
72	—	—	15-82-0629	—	High (.250)	.090"	.455 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)	Black
72	—	—	—	—	Low (.125)	.110"	.455 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)	Grey
72	—	—	—	—	High (.250)	.110"	.455 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)	Black
72	—	—	15-82-0620	—	Low (.125)	.140"	.455 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)	Grey
72	—	—	—	—	High (.250)	.140"	.455 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)	Black
80	—	—	—	—	High (.250)	.090"	.495 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)	Black
80	15-82-0625	—	15-82-0624	—	Low (.125)	.110"	.495 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)	Grey
80	—	—	—	—	High (.250)	.140"	.495 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)	Black

Contact local Molex sales office for assistance or options

SIMM Socket
Low Profile (40°), Metal Latch

78976 Series Standard (Left) Polarization

.050" (1.27) Spacing
Single Row with Metal Latches
Hi-Temp. Surface Mount Compatible



- Metal latches eliminate breakage during abuse or misuse of socket
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- Guaranteed two points of contact per read-out with the JEDEC standard module
- High pressure contact system in both tin/lead or gold option for reliable interface
- Audible click ensures module is properly seated
- Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- Polarization posts provide orientation for proper loading of socket into P.C. board
- Polarization rib properly orients module to socket
- Center retention posts maintain connector flush to P.C. board
- JEDEC standard dimensions

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

Terminal: Phosphor Bronze Alloy

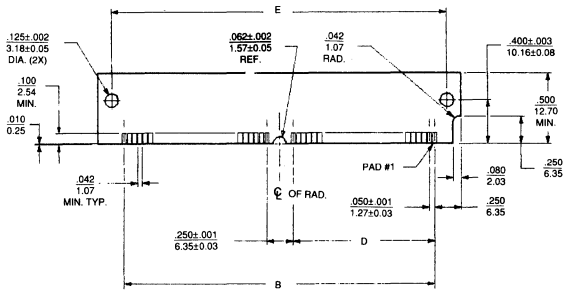
Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

- or -

Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

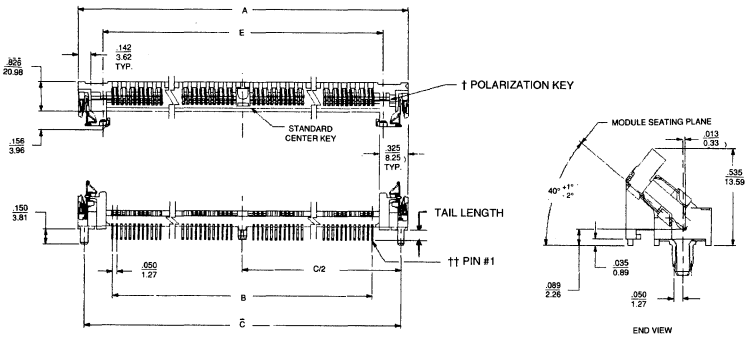
Latch: Stainless steel

Product Specification: PS 78977



"SIMM" P.C. Board Layout

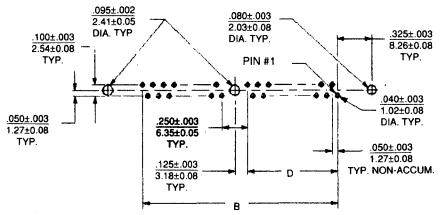
† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.



CENTER POST



.095 DIA. REF. PCB HOLE COMPLIANT



Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

Ordering Information

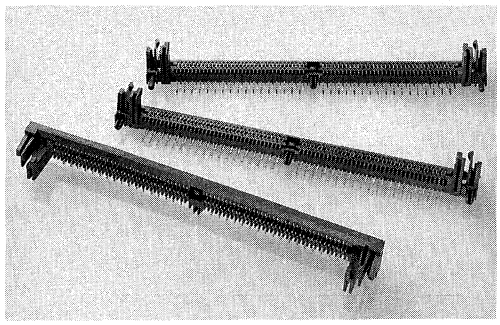
No. of Pos.	Order No. Tin Plate		Order No. Gold Plate		Polarizing Key	Tail Length	Dimensions					Housing Color
	WITH Center Post	WITHOUT Center Post	WITH Center Post	WITHOUT Center Post			A	B	C	D	E	
72	15-82-0619	—	15-82-0628	—	Low (.125)	.090"	.455 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)	Grey
72	—	—	15-82-0627	—	High (.250)	.090"	.455 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)	Black
72	—	—	—	—	Low (.125)	.110"	.455 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)	Grey
72	—	—	15-82-0613	—	High (.250)	.110"	.455 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)	Black
72	—	—	15-82-0621	—	Low (.125)	.140"	.455 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)	Grey
72	—	—	—	—	High (.250)	.140"	.455 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)	Black
80	—	—	—	—	High (.250)	.090"	.495 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)	Black
80	15-82-0622	—	15-82-0623	—	Low (.125)	.110"	.495 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)	Grey
80		—	—	—	High (.250)	.140"	.495 (125.7)	4.15 (105.4)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)	Black

Contact local Molex sales office for assistance or options

SIMM Socket
Right Angle, Plastic Latch

78968 Series Standard (Left) Polarization

.050" (1.27) Spacing
Single Row with Plastic Latches
Hi-Temp. Surface Mount Compatible



- Specially designed plastic latch with anti-overstress feature
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- Guaranteed two points of contact per read-out with the JEDEC standard module
- High pressure contact system in both tin/lead or gold option for reliable interface
- Audible click ensures module is properly seated
- Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- Polarization posts provide orientation for proper loading of socket into P.C. board
- Polarization rib properly orients module to socket
- Center retention posts maintain connector flush to P.C. board
- JEDEC standard dimensions

F

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

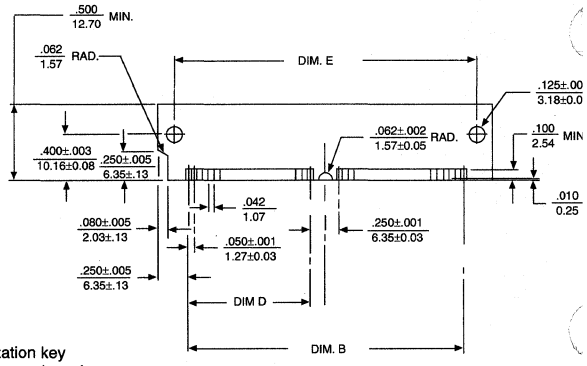
Terminal: Phosphor Bronze Alloy

Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

- or -

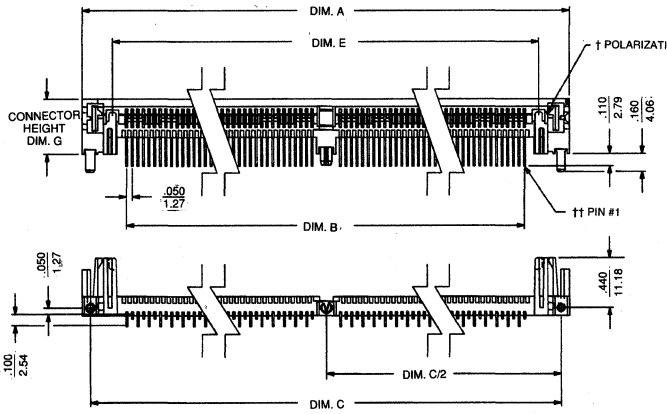
Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

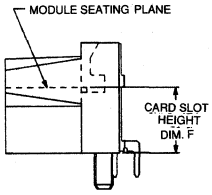
Product Specification: PS 78968



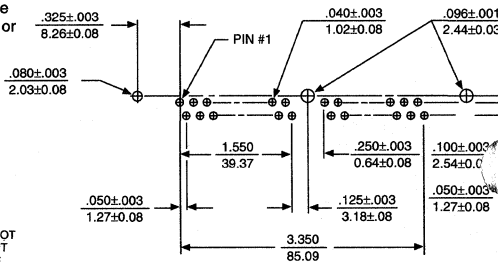
"SIMM" P.C. Board Layout

† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.





END VIEW



Recommended Socket P.C. Board Layout

Ordering Information

No. of Pos.	Order No. Tin Plate				Order No. Gold Plate				Tail Length	Dimensions				
	with .160 Height	with .190 Height	with .250 Height	with .290 Height	with .160 Height	with .190 Height	with .250 Height	with .290 Height		A	B	C	D	I
64									.110"	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (
68		15-82-0318	15-82-0317						.110"	4.35 (110.5)	3.55 (90.2)	4.20 (106.7)	1.65 (41.91)	3.78 (
72		15-82-0323	15-82-0374	15-82-0324	15-82-0319	15-82-0322	15-82-0375	15-82-0322	.110"	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (
80		15-82-0330	15-82-0327	15-82-0331					.110"	4.95 (125.7)	4.15 (105.2)	4.80 (121.9)	1.95 (49.53)	4.38 (

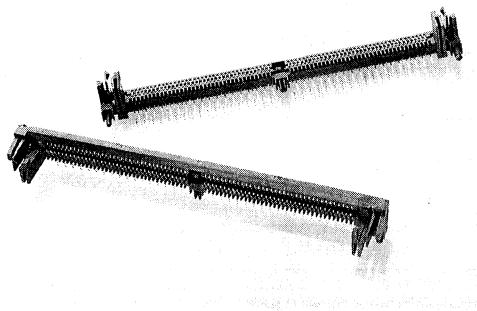
Card Slot Height	Dimension Connector Height
Dim. F	Dim. G
.160 (4.06)	.358 (9.09)
.190 (4.83)	.388 (9.86)
.250 (6.35)	.448 (11.38)
.290 (7.37)	.488 (12.40)

Contact local Molex sales office for assistance or additional options

SIMM Socket
Right Angle, Plastic Latch

78968 Series Reverse (Right) Polarization

.050" (1.27) Spacing
Single Row with Plastic Latches
Hi-Temp. Surface Mount Compatible



- Specially designed plastic latch with anti-overstress feature
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- High-temp SMT compatible material with thermal coefficient of expansion consistent with P.C. board
- Guaranteed two points of contact per read-out with the JEDEC standard module
- High pressure contact system in both tin/lead or gold option for reliable interface
- Audible click ensures module is properly seated
- Rigid tails for greater ease of inserting product in P.C. board and designed for robotic assembly
- Polarization posts provide orientation for proper loading of socket into P.C. board
- Polarization rib properly orients module to socket
- Center retention posts maintain connector flush to P.C. board
- JEDEC standard dimensions

Specifications:

Housings: Liquid Crystal Polymer U.L. 94V-0 rated, color Black

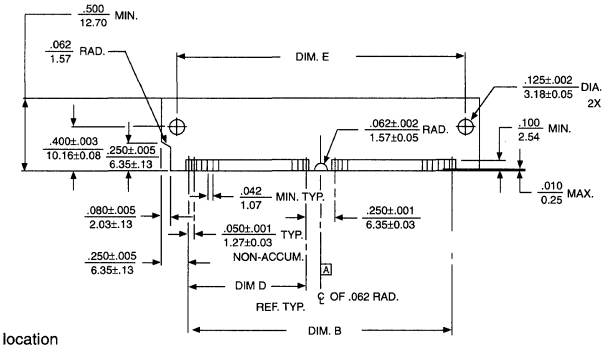
Terminal: Phosphor Bronze Alloy

Plating: Post Plate 200µ" min. tin/lead over 50µ" min. nickel overall

- or -

Post Plate 30µ" min. gold on contact area and 150µ" min. tin/lead on solder tails, all over 75µ" min. nickel

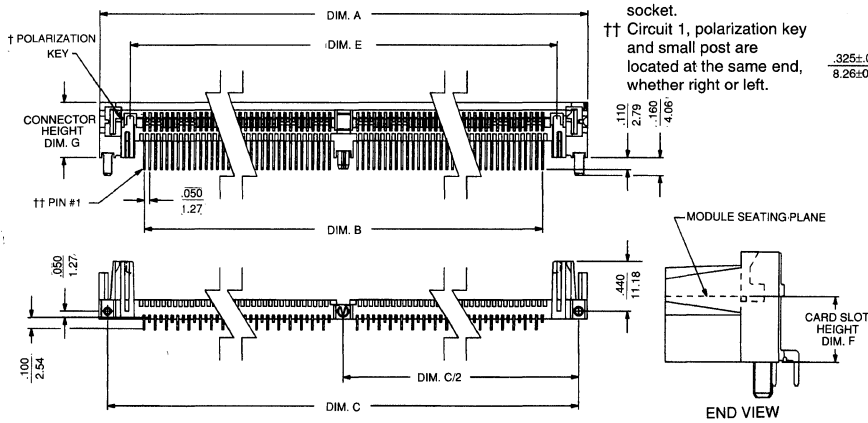
Product Specification: PS 78968

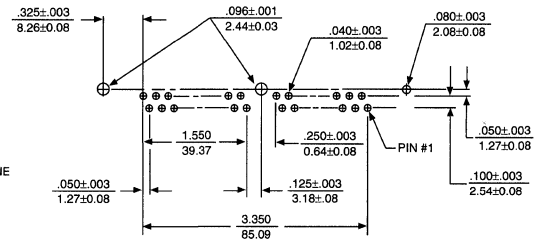


"SIMM" P.C. Board Layout

† Polarization key location as viewed from module insertion side of SIMM socket.

†† Circuit 1, polarization key and small post are located at the same end, whether right or left.





Recommended Socket P.C. Board Layout

Ordering Information

No. of Pos.	Order No. Tin Plate				Order No. Gold Plate				Tail Length	Dimensions				
	with .160 Height	with .190 Height	with .250 Height	with .290 Height	with .160 Height	with .190 Height	with .250 Height	with .290 Height		A	B	C	D	E
64			15-82-0314						.110"	4.15 (105.4)	3.35 (85.1)	4.00 (101.6)	1.55 (39.37)	3.58 (91.03)
68									.110"	4.35 (110.5)	3.55 (90.2)	4.20 (106.7)	1.65 (41.91)	3.78 (96.11)
72							15-82-0320		.110"	4.55 (115.6)	3.75 (95.3)	4.40 (111.8)	1.75 (44.45)	3.98 (101.2)
80									.110"	4.95 (125.7)	4.15 (105.2)	4.80 (121.9)	1.95 (49.53)	4.38 (111.4)

Card Slot Height	Dimension Connector Height
Dim. F	Dim. G
.160 (4.06)	.358 (9.09)
.190 (4.83)	.388 (9.86)
.250 (6.35)	.448 (11.38)
.290 (7.37)	.488 (12.40)

Contact local Molex sales office for assistance or options

Leadless SIP Module or Baby Board* Dimensions for SIMM Sockets

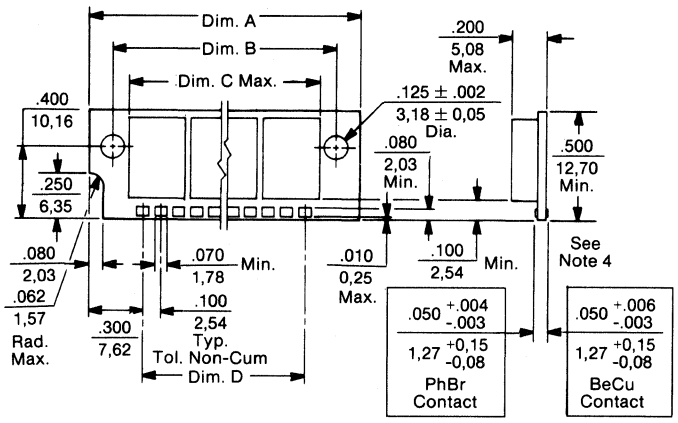
F

***CUSTOMER SUPPLIED**

Single sided leadless SIP module configuration requirements:

1. Copper contact pads are to be overplated with .000050 min. nickel followed with .000030 min. tin/lead reflow or .000030 min. gold over .000075 min. nickel
2. Contact pads are required on both component and circuit sides of module. Paired contacts should be electrically shunted, otherwise all electrical input/outputs should be routed to pads located on the circuit side
3. Maximum allowable warpage = .010" bow. Printed circuit board thickness presumes .047" stock with 1 oz. copper foil

.100" SIMM Modules



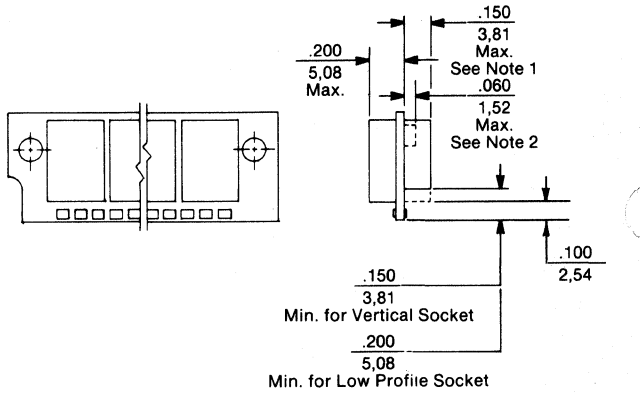
Dimensions .100" (2.54)

CKTS.	DIM. A	DIM. B	DIM. C MAX.	DIM. D
10	1.500 38,10	1.234 31,34	1.050 26,67	.900 22,86
12	1.700 43,18	1.434 36,42	1.250 31,75	1.100 27,94
15	2.000 50,80	1.734 44,04	1.550 39,37	1.400 35,56
18	2.300 58,42	2.034 51,66	1.850 46,99	1.700 43,18
20	2.500 63,50	2.234 56,74	2.050 52,07	1.900 48,26
22	2.700 68,58	2.434 61,82	2.250 57,15	2.100 53,34
24	2.900 73,66	2.634 66,90	2.450 62,23	2.300 58,42
30	3.500 88,90	3.500 82,14	3.050 77,47	2.900 73,66
31	3.600 91,44	3.334 84,68	3.150 80.01	3.000 76,20
32	3.700 93,98	3.434 87,22	3.250 82,55	3.100 78,74
34	3.900 99,06	3.634 92,30	3.450 87,83	3.300 83,82
35	4.000 101,60	3.734 94,84	3.550 90,17	3.400 86,36
36	4.100 104,14	3.834 97,38	3.650 92,71	3.500 88,90
39	4.400 111,76	4.134 105.00	3.950 100,33	3.800 96,52
40	4.500 114,30	4.234 107.54	4.050 102,87	3.900 99,06
42	4.700 119,38	4.434 112,62	4.250 107,95	4.100 104,14
45	5.000 127,00	4.734 120,24	4.550 115,57	4.400 111.76

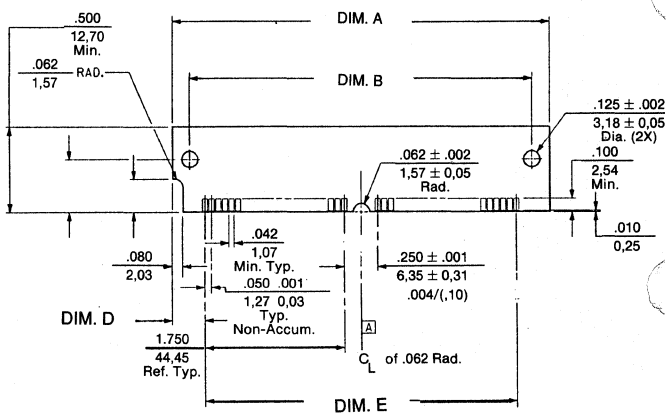
Double sided leadless SIP module configuration requirements [in addition to notes 1-3 (left)]

1. Two modules mounted vertically on .300" centers must have the IC packages staggered on their facing surfaces in order to achieve an interleaf condition
2. No interleaving is necessary on .300" centers for components not in excess of .060"
3. Low profile modules are to be mounted using single row sockets and spaced on .800" centers minimum

   Consult factory for design characteristics on right angle (parallel mounting) product.



.050" SIMM Modules



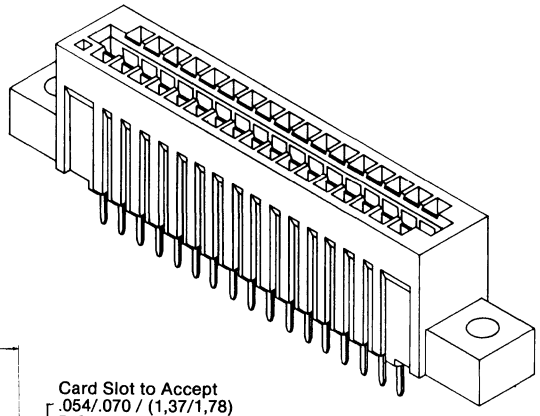
Dimensions .050" (11.27)

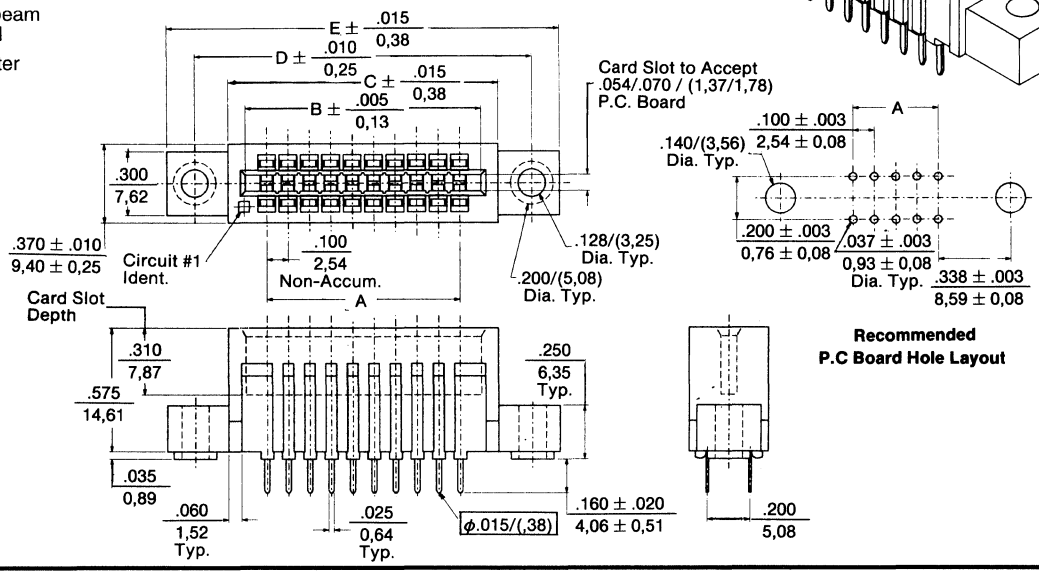
CKTS.	DIM. A	DIM. B	DIM. C MAX.	DIM. D	DIM. E
38	2.550 64,77	2.284 58,01	2.220 56,39	.900 22,86	2.050 52,07
40	2.950 74,93	2.384 60,55	2.320 58,93	.950 24,13	2.150 54,61
60	3.650 92,71	3.384 85,95	3.300 83,82	1.450 36,83	3.150 80,01
64	3.850 97,79	3.584 91,03	3.500 88,90	1.550 39,37	3.350 85,09
68	4.050 102,87	3.784 96,11	3.700 93,98	1.650 41,91	3.550 90,17
72	4.250 107,95	3.984 101,19	3.900 99,06	1.750 44,45	3.750 95,25
80	4.650 118,11	4.384 111.35	4.300 109,22	1.950 49,53	4.150 105,41
90	5.150 130,81	4.884 124,05	4.800 121,92	2.200 55,88	4.650 118,11
100	5.650 143,51	5.384 136,75	5.300 134,62	2.450 62,23	5.150 130,81

.100" 2.54 mm Center Double Sided Edge Connector

71006
PC Tail Connector Flanged Version

- .100" (2,54mm), contact spacing
- .200" (5,08mm), row to row spacing
- Selective gold plated contact area - 15 microinches gold over 50 microinches nickel - solder plated tail
- Bifurcated, cantilevered beam phosphor bronze terminal
- Glass filled 94V-0 polyester housing - black color
- Industry standard dimensions
- P.C. tail only
- **Robotically insertable**
- Also available with .125" P.C. tails. Contact factory





F

Dimensions

Ckt. Size	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Ckt. Size	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Ckt. Size	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E
10/20	.900 22,86	1.100 27,94	1.260 32,00	1.575 40,01	1.835 46,61	21/42	2.000 50,80	2.200 55,88	2.360 59,94	2.675 67,95	2.935 74,55	31/62	3.000 76,20	3.200 81,28	3.360 85,34	3.675 93,35	3.935 99,95
11/22	1.000 25,40	1.200 30,48	1.360 34,54	1.675 42,55	1.935 49,15	22/44	2.100 53,34	2.300 58,42	2.460 62,48	2.775 70,49	3.035 77,09	32/64	3.100 78,74	3.300 83,82	3.460 87,88	3.775 95,89	4.035 102,49
12/24	1.100 27,94	1.300 33,02	1.460 37,08	1.775 45,09	2.035 51,69	23/46	2.200 55,88	2.400 60,96	2.560 65,02	2.875 73,03	3.135 79,63	33/66	3.200 81,28	3.400 86,36	3.560 90,42	3.875 98,43	4.135 105,03
13/26	1.200 30,48	1.400 35,56	1.560 39,62	1.875 47,63	2.135 54,23	24/48	2.300 58,42	2.500 63,50	2.660 67,56	2.975 75,57	3.235 82,17	34/68	3.300 83,82	3.500 88,90	3.660 92,96	3.975 100,97	4.235 107,57
14/28	1.300 33,02	1.500 38,10	1.660 42,16	1.975 50,17	2.235 56,77	25/50	2.400 60,96	2.600 66,04	2.760 70,10	3.075 78,11	3.335 84,71	35/70	3.400 86,36	3.600 91,44	3.760 95,50	4.075 103,51	4.335 110,11
15/30	1.400 35,56	1.600 40,64	1.760 44,70	2.075 52,71	2.335 59,31	26/52	2.500 63,50	2.700 68,58	2.860 72,64	3.175 80,65	3.435 87,25	36/72	3.500 88,90	3.700 93,98	3.860 98,04	4.175 106,05	4.435 112,65
16/32	1.500 38,10	1.700 43,18	1.860 47,24	2.175 55,25	2.435 61,85	27/54	2.600 66,04	2.800 71,12	2.960 75,18	3.275 83,19	3.535 89,79	37/74	3.600 91,44	3.800 96,52	3.960 100,58	4.275 108,59	4.535 115,19
17/34	1.600 40,64	1.800 45,72	1.960 49,78	2.275 57,79	2.535 64,39	28/56	2.700 68,58	2.900 73,66	3.060 77,72	3.375 85,73	3.635 92,33	38/76	3.700 93,98	3.900 99,06	4.060 103,12	4.375 111,13	4.635 117,73
18/36	1.700 43,18	1.900 48,26	2.060 52,32	2.375 60,33	2.635 66,93	29/58	2.800 71,12	3.000 76,20	3.160 80,26	3.475 88,27	3.735 94,87	39/78	3.800 96,52	4.000 101,60	4.160 105,66	4.475 113,67	4.735 120,27
19/38	1.800 45,72	2.000 50,80	2.160 54,86	2.475 62,87	2.735 69,47	30/60	2.900 73,66	3.100 78,74	3.260 82,80	3.575 90,81	3.835 97,41	40/80	3.900 99,06	4.100 104,14	4.260 108,20	4.575 116,21	4.835 122,82
20/40	1.900 48,26	2.100 53,34	2.260 57,40	2.575 65,41	2.835 72,00												

Ordering Information Flanged Version

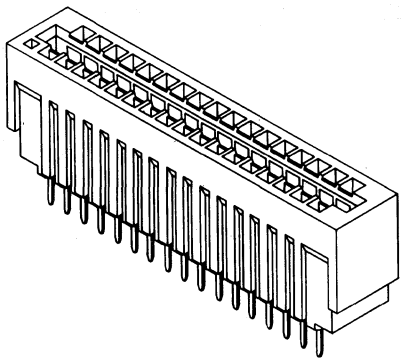
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10/20	15-46-1102	16/32	15-46-1162	21/42	15-46-1212	26/52	15-46-1262	31/62	15-46-1312	36/72	15-46-1362
11/22	15-46-1112	17/34	15-46-1172	22/44	15-46-1222	27/54	15-46-1272	32/64	15-46-1322	37/74	15-46-1372
12/24	15-46-1122	18/36	15-46-1182	23/46	15-46-1232	28/56	15-46-1282	33/66	15-46-1332	38/76	15-46-1382
13/26	15-46-1132	19/38	15-46-1192	24/48	15-46-1242	29/58	15-46-1292	34/68	15-46-1342	39/78	15-46-1392
14/28	15-46-1142	20/40	15-46-1202	25/50	15-46-1252	30/60	15-46-1302	35/70	15-46-1352	40/80	15-46-1402
15/30	15-46-1152										

.100" 2.54 mm Center Double Sided Edge Connector

molex

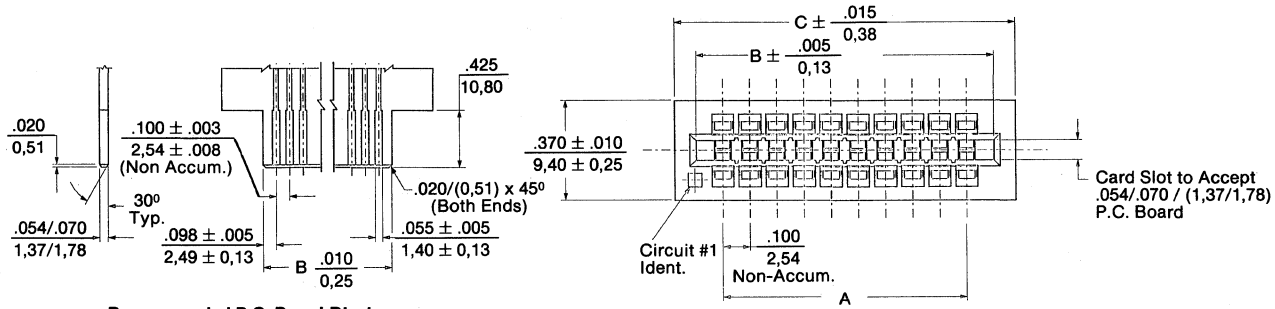
71006

PC Tail Connector Non-Flanged Version

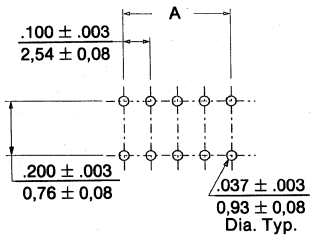


- .100" (2,54mm), contact spacing
- .200" (5,08mm), row to row spacing
- Selective gold plated contact area - 15 microinches gold over 50 microinches nickel - solder plated tail
- Bifurcated, cantilevered beam phosphor bronze terminal
- Glass filled 94V-0 polyester housing - black color
- Industry standard dimensions - Drop in, cost saving replacement
- P.C. tail only
- **Robotically insertable**
- Also available with .125" P.C. tails

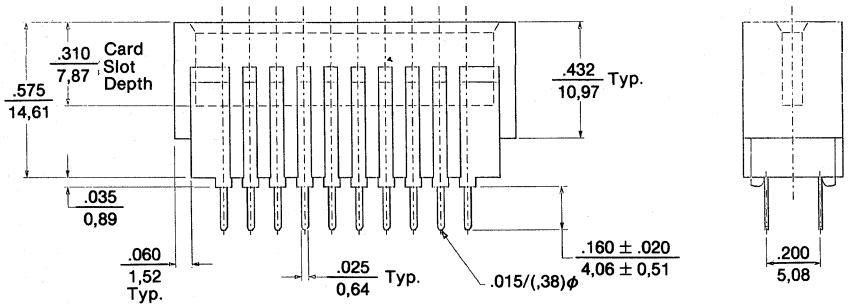
F



Recommended P.C. Board Dim.'s



Recommended P.C Board Hole Layout



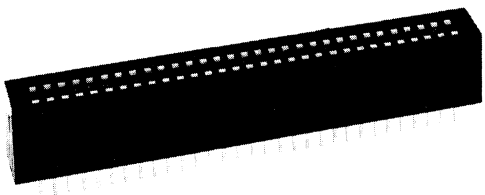
Dimensions Same as 71006 Flanged Version on preceding page

Ordering Information Non-Flanged Version

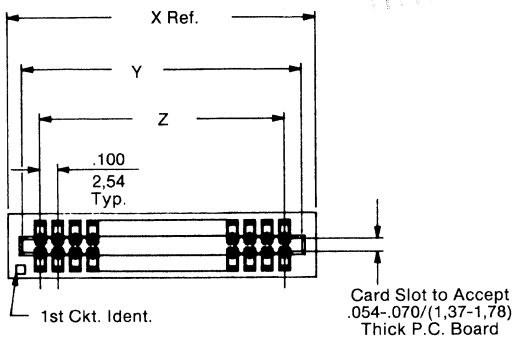
Ckt. Size	Order No.	Ckt. Size	Order No.	Ckt. Size	Order No.	Ckt. Size	Order No.	Ckt. Size	Order No.	Ckt. Size	Order No.
10/20	15-46-1101	16/32	15-46-1161	21/42	15-46-1211	26/52	15-46-1261	31/62	15-46-1311	36/72	15-46-1361
11/22	15-46-1111	17/34	15-46-1171	22/44	15-46-1221	27/54	15-46-1271	32/64	15-46-1321	37/74	15-46-1371
12/24	15-46-1121	18/36	15-46-1181	23/46	15-46-1231	28/56	15-46-1281	33/66	15-46-1331	38/76	15-46-1381
13/26	15-46-1131	19/38	15-46-1191	24/48	15-46-1241	29/58	15-46-1291	34/68	15-46-1341	39/78	15-46-1391
14/28	15-46-1141	20/40	15-46-1201	25/50	15-46-1251	30/60	15-46-1301	35/70	15-46-1351	40/80	15-46-1401
15/30	15-46-1151										

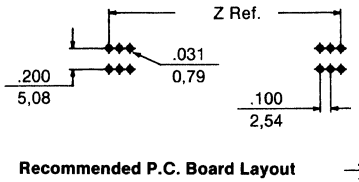
.100" 2.54 mm Center Double Sided Edge Connector

71003 Series
P.C. Tail Connector

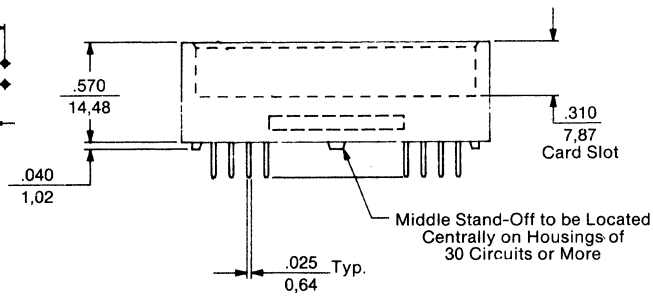


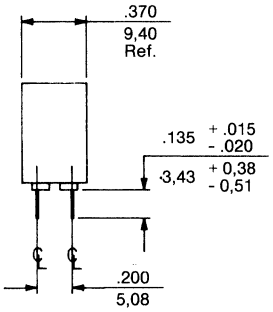
- .100" (2,54mm) contact spacing
- .200" (5,08mm) row-to-row spacing
- Selective gold plated contact area
- Various gold options over 50 microinches nickel; tin/lead in solder area
- Bifurcated, cantilevered beam phosphor bronze terminal
- Glass filled 94V-0 polyester housing — black color
- Low insertion force version available. See 87087 Series





Recommended P.C. Board Layout





F

Dimensions

Ckts.	Dim. X	Dim. Y	Dim. Z	Ckts.	Dim. X	Dim. Y	Dim. Z	Ckts.	Dim. X	Dim. Y	Dim. Z	Ckts.	Dim. X	Dim. Y	Dim. Z
10/20	1.260 32,00	1.100 27,94	.900 22,86	21/42	2.360 59,94	2.200 55,88	2.000 50,80	31/62	3.360 85,34	3.200 81,28	3.000 76,20	41/82	4.360 110,74	4.200 106,68	4.000 101,60
11/22	1.360 34,54	1.200 30,48	1.000 25,40	22/44	2.460 62,48	2.300 58,42	2.100 53,34	32/64	3.460 87,88	3.300 83,82	3.100 78,74	42/84	4.460 113,28	4.300 109,22	4.100 104,14
12/24	1.460 37,08	1.300 33,02	1.100 27,94	23/46	2.560 65,02	2.400 60,96	2.200 55,88	33/66	3.560 90,42	3.400 86,36	3.200 81,28	43/86	4.560 115,82	4.400 111,76	4.200 106,68
13/26	1.560 39,62	1.400 35,56	1.200 30,48	24/48	2.660 67,56	2.500 63,50	2.300 58,42	34/68	3.660 92,96	3.500 88,90	3.300 83,82	44/88	4.660 118,36	4.500 114,30	4.300 109,22
14/28	1.660 42,16	1.500 38,10	1.300 33,02	25/50	2.760 70,10	2.600 66,04	2.400 60,96	35/70	3.760 95,50	3.600 91,44	3.400 86,36	45/90	4.760 120,90	4.600 116,84	4.400 111,76
15/30	1.760 44,70	1.600 40,64	1.400 35,56	26/52	2.860 72,64	2.700 68,58	2.500 63,50	36/72	3.860 98,04	3.700 93,98	3.500 88,90	46/92	4.860 123,44	4.700 119,38	4.500 114,30
16/32	1.860 47,24	1.700 43,18	1.500 38,10	27/54	2.960 75,18	2.800 71,12	2.600 66,04	37/74	3.960 100,58	3.800 96,52	3.600 91,44	47/94	4.960 125,98	4.800 121,92	4.600 116,84
17/34	1.960 49,78	1.800 45,72	1.600 40,64	28/56	3.060 77,72	2.900 73,66	2.700 68,58	38/76	4.060 103,12	3.900 99,06	3.700 93,98	48/96	5.060 128,52	4.900 124,46	4.700 119,38
18/36	2.060 52,32	1.900 48,26	1.700 43,18	29/58	3.160 80,26	3.000 76,20	2.800 71,12	39/78	4.160 105,66	4.000 101,60	3.800 96,52	49/98	5.160 131,06	5.000 127,00	4.800 121,92
19/38	2.160 54,86	2.000 50,80	1.800 45,72	30/60	3.260 82,80	3.100 78,74	2.900 73,66	40/80	4.260 108,20	4.100 104,14	3.900 99,06	50/100	5.260 133,60	5.100 129,54	4.900 124,46
20/40	2.260 57,40	2.100 53,34	1.900 48,26												

Ordering Information

Order No. Formula

71003-XX XX

41 = 15 microinches min. gold in contact area
17 = 20 microinches min. gold in contact area
44 = 30 microinches min. gold in contact area

= Circuit size desired - 10-50

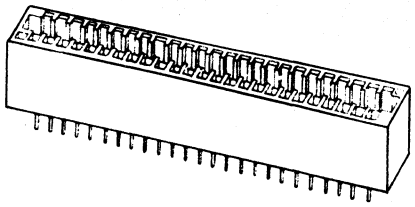
Example: For 18/36 size with 20 microinches min. gold in contact area, Order No. is 71003-1718
Contact factory for other plating options

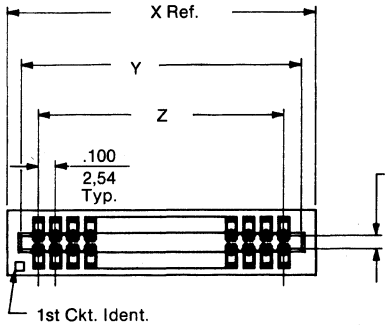
.100" 2.54 mm Center Double Sided Edge Connector

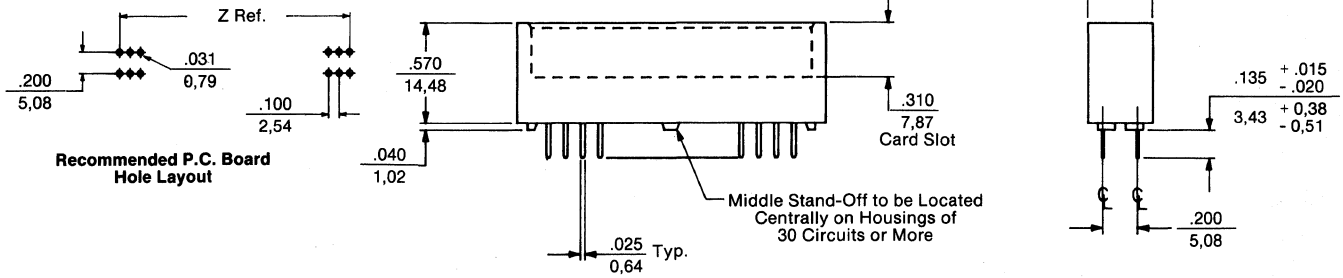
87087 Series

P.C. Tail Connector Low Insertion Force

- .100" (2,54mm) contact spacing
- .200" (5,08mm) row-to-row spacing
- Selective gold plated contact area
- Various gold options over 50 microinches nickel; tin/lead in solder area
- Bifurcated, cantilevered beam phosphor bronze terminal
- Glass filled 94V-0 polyester housing — black color







F

Dimensions

Ckts.	Dim. X	Dim. Y	Dim. Z	Ckts.	Dim. X	Dim. Y	Dim. Z	Ckts.	Dim. X	Dim. Y	Dim. Z	Ckts.	Dim. X	Dim. Y	Dim. Z
10/20	1.260 32,00	1.100 27,94	.900 22,86	23/46	2.560 65,02	2.400 60,96	2.200 55,88	36/72	3.860 98,04	3.700 93,98	3.500 88,90	49/98	5.160 131,06	5.000 127,00	4.800 121,92
11/22	1.360 34,54	1.200 30,48	1.000 25,40	24/48	2.660 67,56	2.500 63,50	2.300 58,42	37/74	3.960 100,58	3.800 96,52	3.600 91,44	50/100	5.260 133,60	5.100 129,54	4.900 124,46
12/24	1.460 37,08	1.300 33,02	1.100 27,94	25/50	2.760 70,10	2.600 66,04	2.400 60,96	38/76	4.060 103,12	3.900 99,06	3.700 93,98	51/102	5.360 136,14	5.200 132,08	5.000 127,00
13/26	1.560 39,62	1.400 35,56	1.200 30,48	26/52	2.860 72,64	2.700 68,58	2.500 63,50	39/78	4.160 105,66	4.000 101,60	3.800 96,52	52/104	5.460 138,68	5.300 134,62	5.100 129,54
14/28	1.660 42,16	1.500 38,10	1.300 33,02	27/54	2.960 75,18	2.800 71,12	2.600 66,04	40/80	4.260 108,20	4.100 104,14	3.900 99,06	53/106	5.560 141,22	5.400 137,16	5.200 132,08
15/30	1.760 44,70	1.600 40,64	1.400 35,56	28/56	3.060 77,72	2.900 73,66	2.700 68,58	41/82	4.360 110,74	4.200 106,68	4.000 101,60	54/108	5.660 143,76	5.500 139,70	5.300 134,62
16/32	1.860 47,24	1.700 43,18	1.500 38,10	29/58	3.160 80,26	3.000 76,20	2.800 71,12	42/84	4.460 113,28	4.300 109,22	4.100 104,14	55/110	5.760 146,30	5.600 142,24	5.400 137,16
17/34	1.960 49,78	1.800 45,72	1.600 40,64	30/60	3.260 82,80	3.100 78,74	2.900 73,66	43/86	4.560 115,82	4.400 111,76	4.200 106,68	56/112	5.860 148,84	5.700 144,78	5.500 139,70
18/36	2.060 52,32	1.900 48,26	1.700 43,18	31/62	3.360 85,34	3.200 81,28	3.000 76,20	44/88	4.660 118,36	4.500 114,30	4.300 109,22	57/114	5.960 151,38	5.800 147,32	5.600 142,24
19/38	2.160 54,86	2.000 50,80	1.800 45,72	32/64	3.460 87,88	3.300 83,82	3.100 78,74	45/90	4.760 120,90	4.600 116,84	4.400 111,76	58/116	6.060 153,92	5.900 149,86	5.700 144,78
20/40	2.260 57,40	2.100 53,34	1.900 48,26	33/66	3.560 90,42	3.400 86,36	3.200 81,28	46/92	4.860 123,44	4.700 119,38	4.500 114,30	59/118	6.160 156,46	6.000 152,40	5.800 147,32
21/42	2.360 59,94	2.200 55,88	2.000 50,80	34/68	3.660 92,96	3.500 88,90	3.300 83,82	47/94	4.960 125,98	4.800 121,92	4.600 116,84	60/120	6.260 159,00	6.100 154,94	5.900 149,86
22/44	2.460 62,48	2.300 58,42	2.100 53,34	35/70	3.760 95,50	3.600 91,44	3.400 86,36	48/96	5.060 128,52	4.900 124,46	4.700 119,38				

Ordering Information

Order No. Formula

87087-XX,XX

00 = 15 microinches min. gold in contact area
12 = 20 microinches min. gold in contact area
03 = 30 microinches min. gold in contact area

= Circuit size desired - 10-60

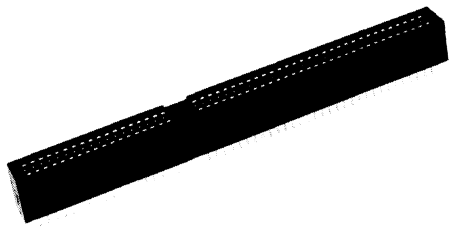
Example: For 18/36 size with 20 microinches min. gold in contact area, Order No. is 87087-1218

Contact factory for other plating options. For versions with kinked tails for P.C. board retention, see 71015 Series

.100" 2.54 mm Center Double Sided Edge Connector

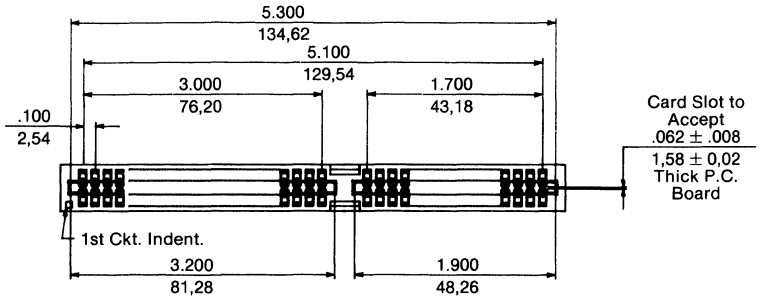
87087 Series

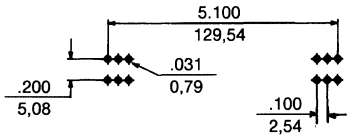
P.C. Tail Connector
Dual Slot 98 Circuit Version



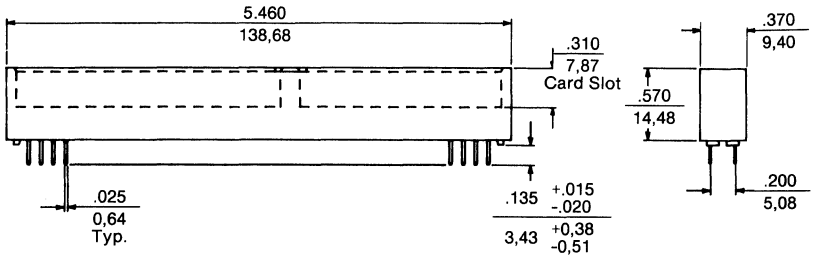
- .100" (2,54mm), contact spacing; .200" (5,08mm), row to row spacings
- Selective gold plated contact area
- Bifurcated phosphor bronze terminal
- Glass filled 94V-0 polyester housing
- Industry standard dimensions
- Dual slots (36 and 62 positions)
- Board retention option available

F





Recommended PC Board Layout



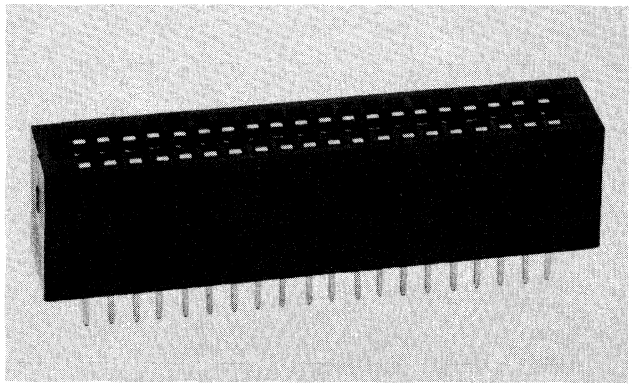
Ordering Information 98 Circuit Version

Order No.	Plating
87087-0099	15 microinches (38 microns) min. gold in contact area
87087-1299	20 microinches (50 microns) min. gold in contact area
87087-0399	30 microinches (76 microns) min. gold in contact area

.100" 2.54 mm Center Double Sided Edge Connector

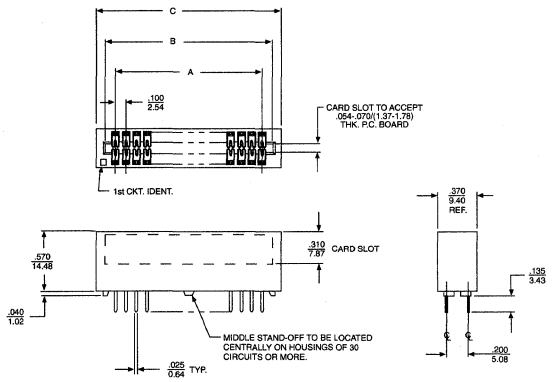
71015 Series

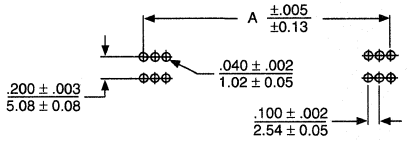
P.C. Tail Connector Low Insertion Force With Kinked P.C. Tails



- .100" 2,54mm contact spacing
- First four circuit pairs on each end are kinked
- .200" 5,08mm row-to-row spacing
- Selective gold plated contact area
- Various gold options over 50 microinches nickel; tin/lead in solder area
- Bifurcated, cantilevered beam phosphor bronze terminal
- Glass filled PBT housing — black color
- Middle stand-off on 30 circuits and above
- Polarizing position version available (contact factory)

F





RECOMMENDED PCB LAYOUT

Dimensions

Ckts.	Dim. X	Dim. Y	Dim. Z	Ckts.	Dim. X	Dim. Y	Dim. Z	Ckts.	Dim. X	Dim. Y	Dim. Z	Ckts.	Dim. X	Dim. Y	Dim. Z
10/20	1.260 32,00	1.100 27,94	.900 22,86	23/46	2.560 65,02	2.400 60,96	2.200 55,88	36/72	3.860 98,04	3.700 93,98	3.500 88.90	49/98	5.160 131,06	5.000 127,00	4.800 121,92
11/22	1.360 34,54	1.200 30,48	1.000 25,40	24/48	2.660 67,56	2.500 63,50	2.300 58,42	37/74	3.960 100,58	3.800 96,52	3.600 91,44	50/100	5.260 133,60	5.100 129,54	4.900 124,46
12/24	1.460 37,08	1.300 33,02	1.100 27,94	25/50	2.760 70,10	2.600 66,04	2.400 60,96	38/76	4.060 103,12	3.900 99,06	3.700 93,98	51/102	5.360 136,14	5.200 132,08	5.000 127,00
13/26	1.560 39.62	1.400 35,56	1.200 30,48	26/52	2.860 72,64	2.700 68,58	2.500 63,50	39/78	4.160 105,66	4.000 101,60	3.800 96,52	52/104	5.460 138,68	5.300 134,62	5.100 129,54
14/28	1.660 42,16	1.500 38,10	1.300 33,02	27/54	2.960 75,18	2.800 71,12	2.600 66,04	40/80	4.260 108,20	4.100 104,14	3.900 99,06	53/106	5.560 141,22	5.400 137,16	5.200 132,08
15/30	1.760 44,70	1.600 40,64	1.400 35,56	28/56	3.060 77,72	2.900 73,66	2.700 68,58	41/82	4.360 110,74	4.200 106,68	4.000 101,60	54/108	5.660 143,76	5.500 139,70	5.300 134,62
16/32	1.860 47,24	1.700 43,18	1.500 38,10	29/58	3.160 80,26	3.000 76,20	2.800 71,12	42/84	4.460 113,28	4.300 109,22	4.100 104,14	55/110	5.760 146,30	5.600 142,24	5.400 137,16
17/34	1.960 49,78	1.800 45,72	1.600 40,64	30/60	3.260 82,80	3.100 78,74	2.900 73,66	43/86	4.560 115,82	4.400 111,76	4.200 106,68	56/112	5.860 148,84	5.700 144,78	5.500 139,70
18/36	2,060 52,32	1.900 48,26	1.700 43,18	31/62	3.360 85,34	3.200 81,28	3.000 76,20	44/88	4.660 118,36	4.500 114,30	4.300 109,22	57/114	5.960 151,38	5.800 147,32	5.600 142,24
19/38	2.160 54,86	2.000 50,80	1.800 45,72	32/64	3.460 87,88	3.300 83,82	3.100 78,74	45/90	4.760 120,90	4.600 116,84	4.400 111,76	58/116	6.060 153,92	5.900 149,86	5.700 144,78
20/40	2.260 57,40	2.100 53,34	1.900 48,26	33/66	3.560 90,42	3.400 86,36	3.200 81,28	46/92	4.860 123,44	4.700 119,38	4.500 114,30	59/118	6.160 156,46	6.000 152,40	5.800 147,32
21/42	2.360 59,94	2.200 55,88	2.000 50,80	34/68	3.660 92,96	3.500 88,90	3.300 83,82	47/94	4.960 125,98	4.800 121,92	4.600 116,84	60/120	6.260 159,00	6.100 154.94	5.900 149,86
22/44	2.460 62,48	2.300 58,42	2.100 53,34	35/70	3,760 95,50	3.600 91,44	3.400 86,36	48/96	5.060 128,52	4.900 124,46	4.700 119,38				

Ordering Information

Order No. Formula
71015 - XX XX

Plating Options:
00 = 15µin. min. gold in contact area
12 = 20µin. min. gold in contact area
03 = 30µin. min. gold in contact area

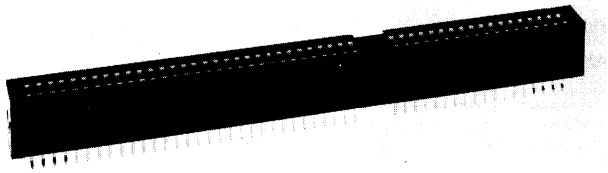
Circuit Size:
10-60

Example: for 18/36 size with 20 microinches min. gold in contact area, Order No. is 75015-1218
Contact factory for other plating options.

.100" 2.54 mm Center Double Sided Edge Connector

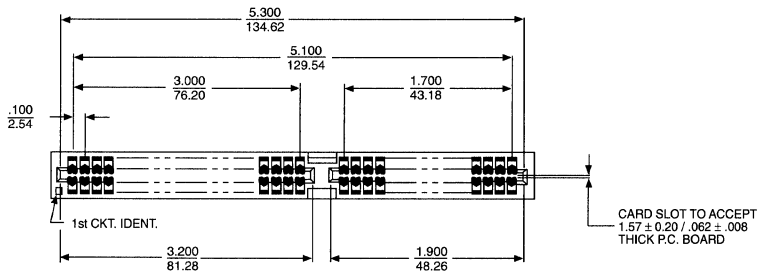
71015 Series

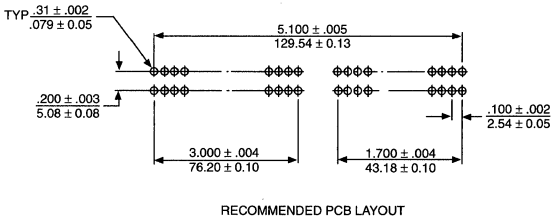
P.C. Tail Connector
Low Insertion Force
Dual Slot 98 Circuit Version
With Kinked P.C. Tails



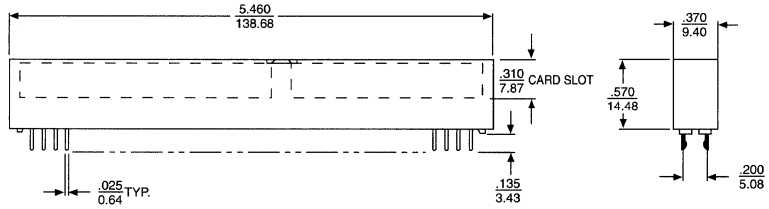
- .100" 2,54mm contact spacing; .200" 5,08mm, row to row spacings
- First four circuit pairs on each end are kinked
- Selective gold plated contact area
- Bifurcated phosphor bronze terminal
- Glass filled PCT housing: black color
- Industry standard dimensions
- Dual slots (36 and 62 positions)

F





RECOMMENDED PCB LAYOUT



Ordering Information 98 Circuit Version

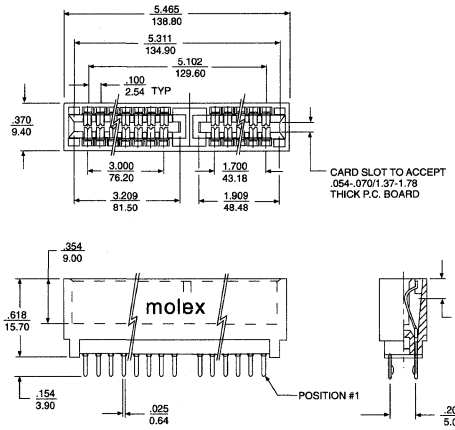
Order No.	Plating
71015-9999	15µin. min. gold in contact area
71015-9599	20µin. min. gold in contact area
71015-9299	30µin. min. gold in contact area

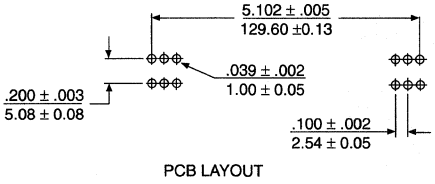
.100" 2.54 mm Center Double Sided Edge Connector

87171 Series
P.C. Tail Connector
Dual Slot 98 Circuit Version
With Kinked P.C. Tails

- Kinked circuits: #4, #22, and #46 from right
- .100" 2,54mm contact spacing; .200" 5,08mm row to row spacings
- Selective gold plated contact area
- Bifurcated phosphor bronze terminal
- Glass filled PCT housing; black color
- Industry standard dimensions
- Dual slots (36 and 62 positions)

F



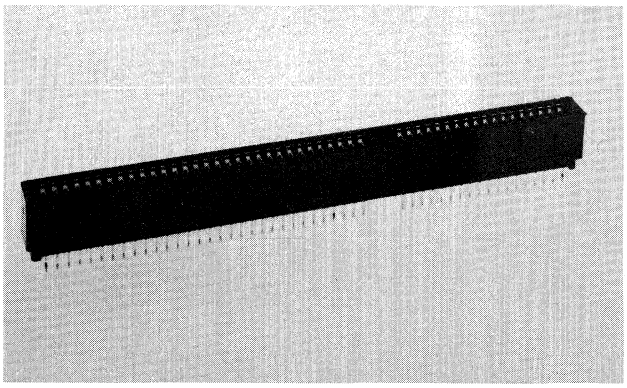


PCB LAYOUT

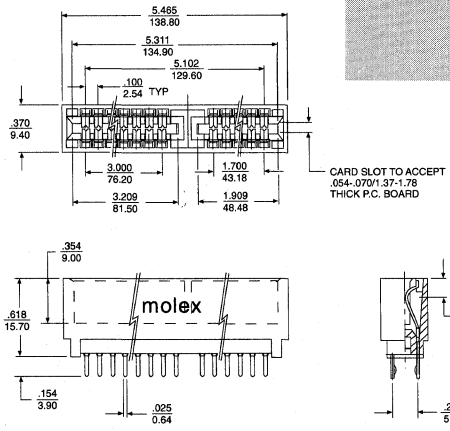
Ordering Information

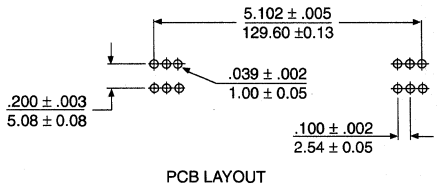
Order No.	Plating
87171-9805	Gold flash in contact area

87171 Series
P.C. Tail Connector
Dual Slot 98 Circuit Version
With Kinked P.C. Tails



- Kinked circuits: First, center and last
- .100" 2,54mm contact spacing; .200" 5,08mm row to row spacings
- Selective gold plated contact area
- Bifurcated phosphor bronze terminal
- Glass filled PCT housing; black color
- Industry standard dimensions
- Dual slots (36 and 62 positions)





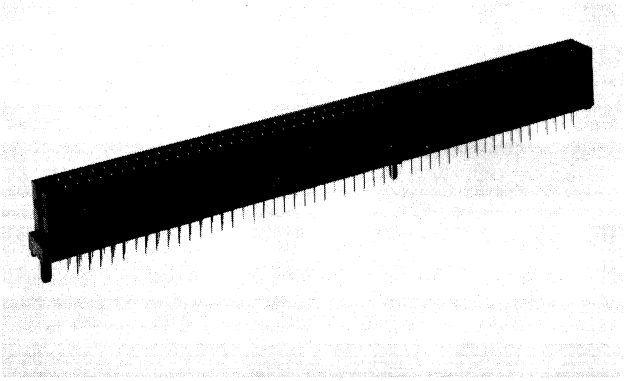
PCB LAYOUT

Ordering Information

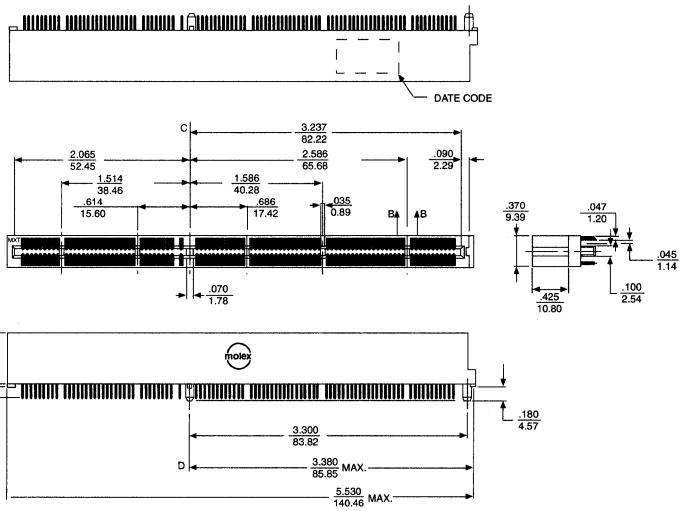
Order No.	Plating
87171-9801	Gold flash in contact area

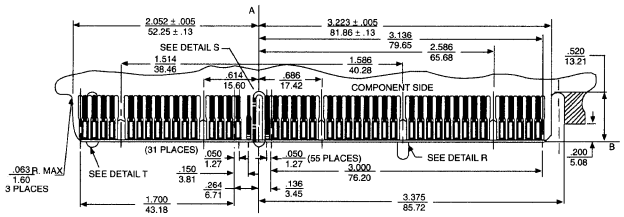
.050" 1.27 mm Center Double Sided Edge Connector

71124 Series
EISA Extended Industry Standard Architecture

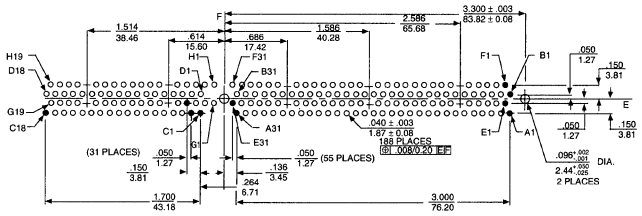


- 188 circuit
- Upper level (ISA) & lower level (EISA)
- Phosphor bronze contacts with selective gold, tin/lead plating
- High temperature 94V-0 PPS housing withstands vapor phase and IR processes
- Large lead-in angle prevents mis-mating
- Flow thru design provides clearance between terminal sides and housing
- Semi-bellows contacts provide high normal forces and low insertion
- Positive contact stop resists contact push out during insertion of connector into P.C. board
- Rigid P.C. tail construction provides ease of insertion into P.C. board
- Positive standoff allows cleaning
- Two positive hold downs provide polarization to the P.C. board





EISA BOARD PAD PATTERN



PCB LAYOUT

Ordering Information

Order No. Formula
71124 - 0 X X 0

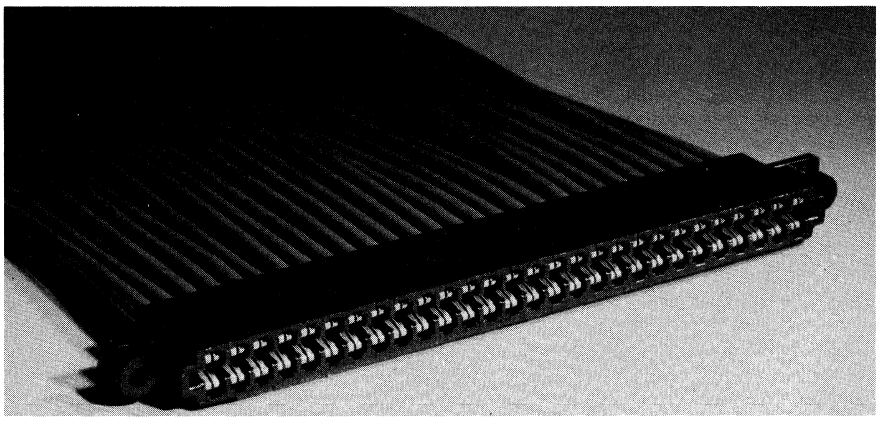
Plating
1 = 30µin gold in contact area
2 = 15µin. gold in contact area
4 = Gold flash in contact area

Housing Color
0 = Black
1 = Brown

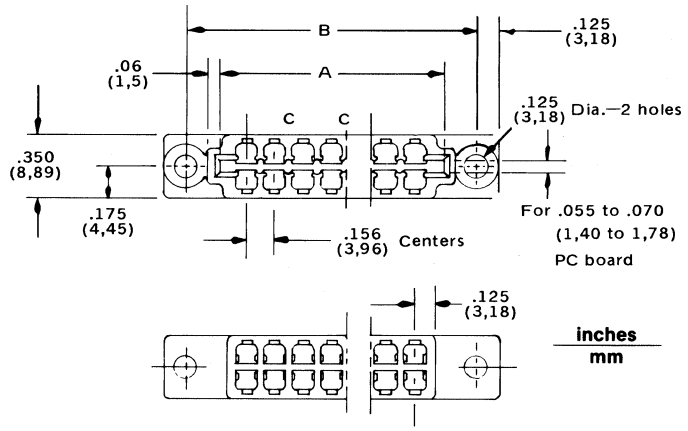
.156" 3.96 mm Center Double Sided Edge Connector Housing

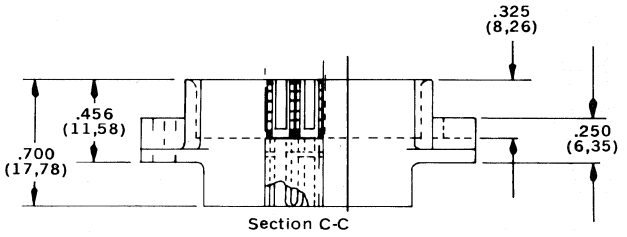
4338
Double Sided Crimp Housing

- 94V-0 polyester housing material
- Optional mounting flanges
- Optional polarizing keys
  6532 (intercontact) plastic
  43072 (on contact) plastic (See ordering information below)
- Will accept .062" thick P.C. boards
- U.L. listed



F





Dimensions

No. of Dual Positions	Dim. A	Dim. B	No. of Dual Positions	Dim. A	Dim. B	No. of Dual Positions	Dim. A	Dim. B	No. of Dual Positions	Dim. A	Dim. B	No. of Dual Positions	Dim. A	Dim. B
6	1.100 27,94	1.531 38,89	10	1.722 43,74	2.160 54,80	15	2.504 63,60	2.940 74,60	22	3.596 91,34	4.030 102,4	25	4.060 103,12	4.50 113,9
8	1.410 35,81	1.770 44,90	12	2.034 51,66	2.470 62,6	18	2.950 74,93	3.410 86,50	24	3.909 99,29	4.343 110,31	28	4.530 115,06	4.960 126,0

Ordering Information

No. of Dual Positions	Order No. With Mtg. Flange	Order No. Without Mtg. Flange	No. of Dual Positions	Order No. With Mtg. Flange	Order No. Without Mtg. Flange	No. of Dual Positions	Order No. With Mtg. Flange	Order No. Without Mtg. Flange	No. of Dual Positions	Order No. With Mtg. Flange	Order No. Without Mtg. Flange
6	• 09-50-6065	09-50-5065	12	• 09-50-6125	09-50-5125	22	• 09-50-6225	09-50-5225	25	• 09-50-6255	09-50-5255
8	• 09-50-6085	09-50-5085	15	• 09-50-6155	09-50-5155	24	• 09-50-6245	09-50-5245	28	• 09-50-6285	09-50-5285
10	• 09-50-6105	09-50-5105	18	• 09-50-6185	09-50-5185						

• U.S. Standard Product, available through Molex franchised distributors.

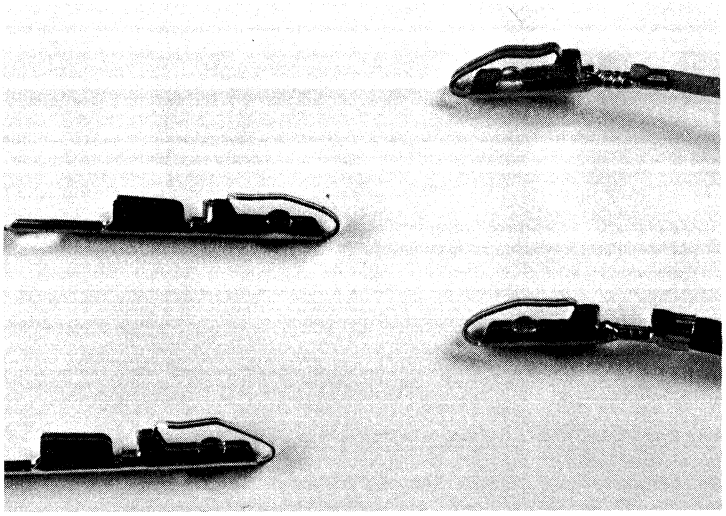
Optional Polarizing Keys	Order No.
6532	15-04-0233
43072	15-05-1004

Double Sided Edge Connector Terminals

4366, 4573, 4574 and 4837

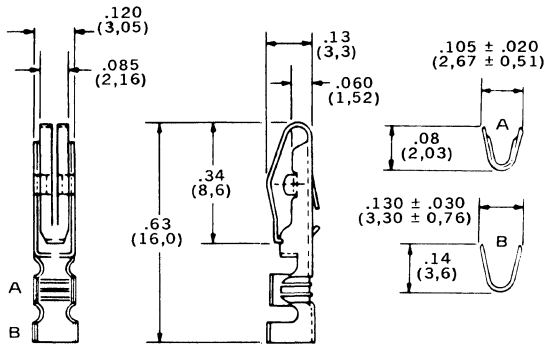
P.C. Crimp and Solder Eyelet

- For use with 4338, 4802 housing
- Crimp wire size 18-30 AWG
- Contact material brass
- Pre-tin or selective gold plating
- Solder loop and split eyelet version available
- Anti-fishhooking feature prevents terminals from snagging
- Wire barrier prevents stripped wire from entering the contact area
- Coined outside edges prevent excess scoring of the solder pad surfaces
- Patented bifurcated contact area

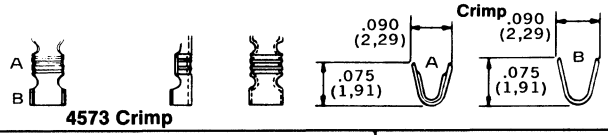


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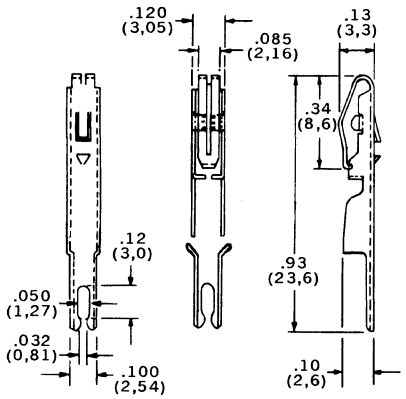
inches
mm



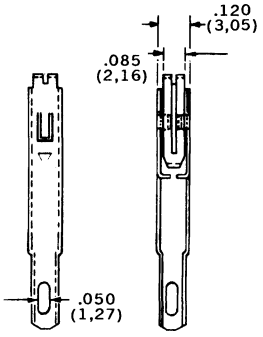
4366 Crimp



4573 Crimp



4837 Split Eyelet



4574 Eyelet

Ordering Information

Crimp Wire Size	Insulation Diameter	Eng. No.	Order Number	
			Chain Form	Loose Form
18-24	.060/.120	4366	• 08-03-0303	• 08-03-0304
	1,52/3,05	4366 (a)	• 08-05-0301	• 08-05-0302
24-30	.040/.090	4573	• 08-03-0305	• 08-03-0306
	1,02/2,29	4573 (a)	• 08-05-0303	• 08-05-0304
PC Tail Solder Loop		4574 (b)	08-01-0201	• 08-01-0202
PC Tail Split Eyelet		4837	—	08-01-0203

• U.S. Standard Product, available through Molex franchised distributors.

(a) .000015 (0,00038mm) minimum selective gold plating over .00003 (0,0008mm) minimum overall nickel plate.

(b) Tab loop will accommodate a maximum of two 16 AWG solid wires or two 18 stranded wires.

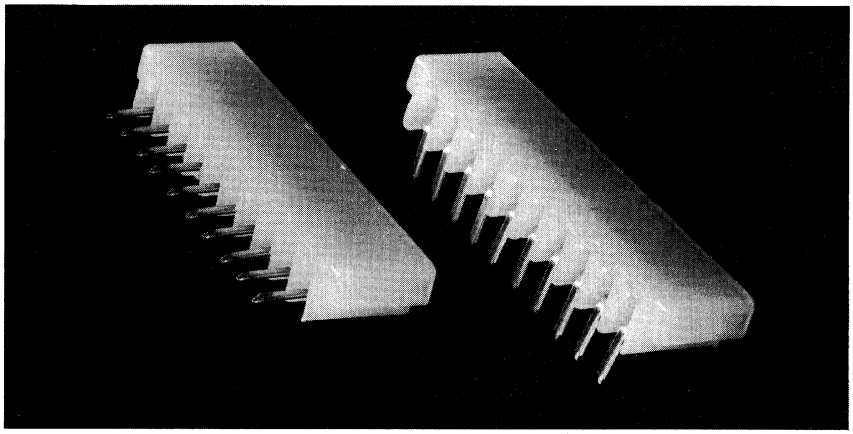
For application tooling see Section M of this catalog.

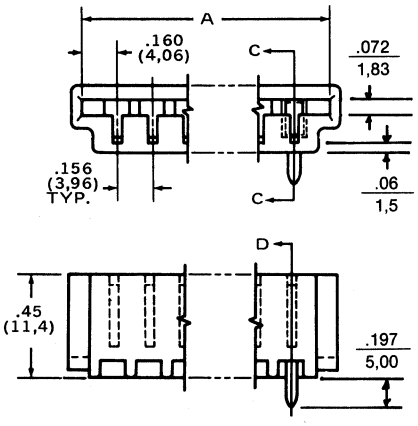
.156" 3.96 mm Center Single Sided Edge Connector

2184
Single Sided P.C. Tail Edge Connector

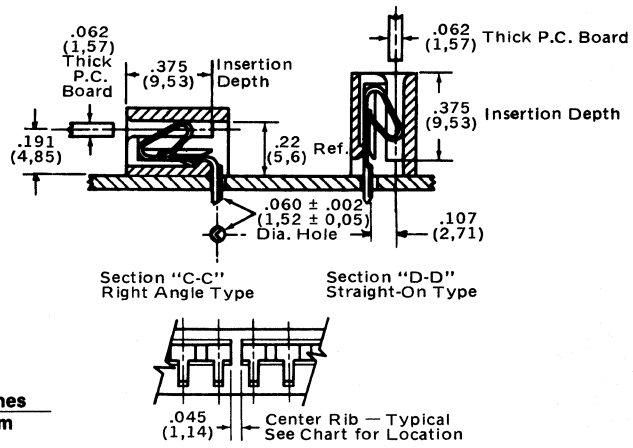
- 94V-2 nylon
- Polarization provided by structural ribs
- Housing preassembled with terminals
- Straight or right angle mounting
- Will accept .062" (1,57mm) P.C. board
- Tin or gold plated brass terminals

F





inches
mm



Dimensions

Circuits	Dim. A	Center Rib Location
6	1.100 ± .015 27,94 ± 0,38	Between ckts. 3 & 4
8	1.568 ± .015 39.83 ± 0.38	Between ckts. 5 & 6
10	1.724 ± .015 43,97 ± 0.38	(2) Between ckts. 4 & 5; 7 & 8

Ordering Information

Circuits	Straight On Order No.*	Right Angle Order No.*
6	09-03-1062	09-03-1061
9	09-03-1092	09-03-1091
10	09-03-1102	—

*These order numbers are for Tin-Plated Brass Terminals.
For Gold, use number 09-04-XXXX in place of 09-03-XXXX.

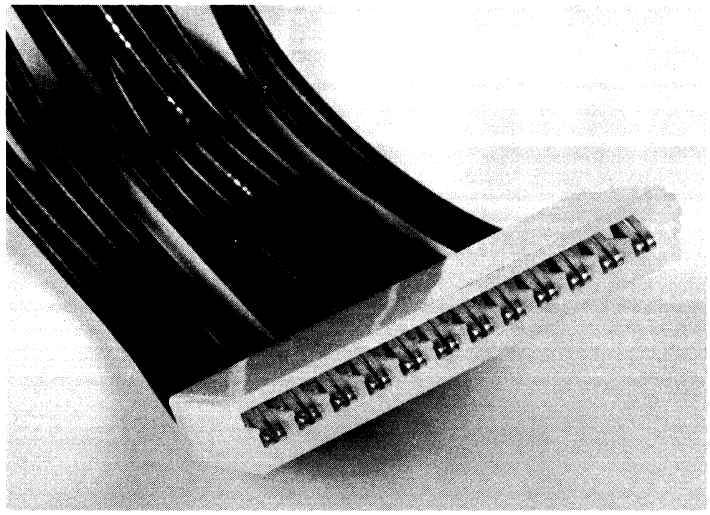
.156" 3.96 mm Center Single Sided Edge Connector Housing

1796

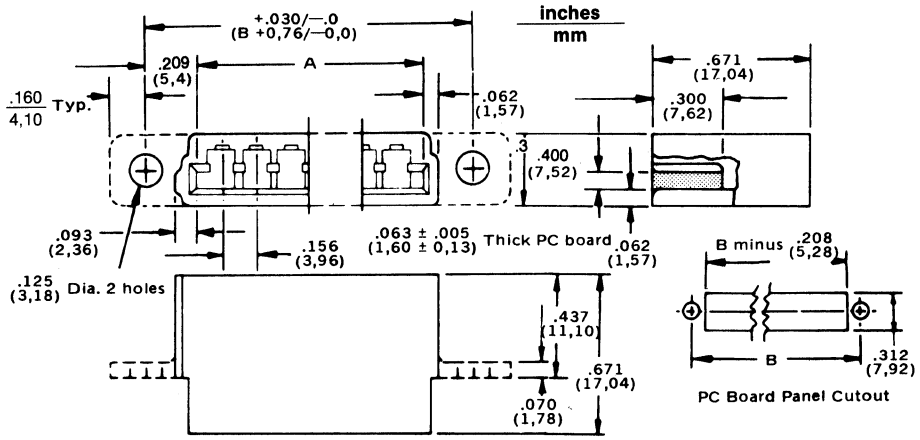
International Single Sided P.C. Edge Connector Housing for Crimp Terminals

- 94V-2 nylon
- Optional mounting flanges
- Optional polarizing key 2011 (on contact)
- Optional patented bifurcated terminals
- Will accept .062" thick (1,57mm) P.C. boards
- U/L and CSA recognized

Terminals: 1797, 1917, 2012, 4295, and 2014; Order separately.
See next page



F



Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
6	.966 (+.020/-.000) 24,54 (+0,51/-0,00)	1.392 35,36	15	2.370 (+ .020/-.000) 60,20 (+ 0,51/-0,00)	2.796 71,02	22	3.462 (+ .025/-.000) 87,94 (+ 0,64/-0,00)	3.888 98,76
9	1.434 (+ .020/-.000) 36,42 (+ 0.51/-0,00)	1.860 47,24	18	2.838 (+ .020/-.000) 72,09 (+ 0,51/-0,00)	3.264 82,91	24	3.774 (+ .030/-.000) 95,86 (+ 0,76/-0,00)	4.200 106,68
12	1.902 (+ .020/-.000) 48,31 (+ 0,51/-0,00)	2.328 59,13	21	3.306 (+ .025/-.000) 83,97 (+ 0,64/-0,00)	3.732 94,79			

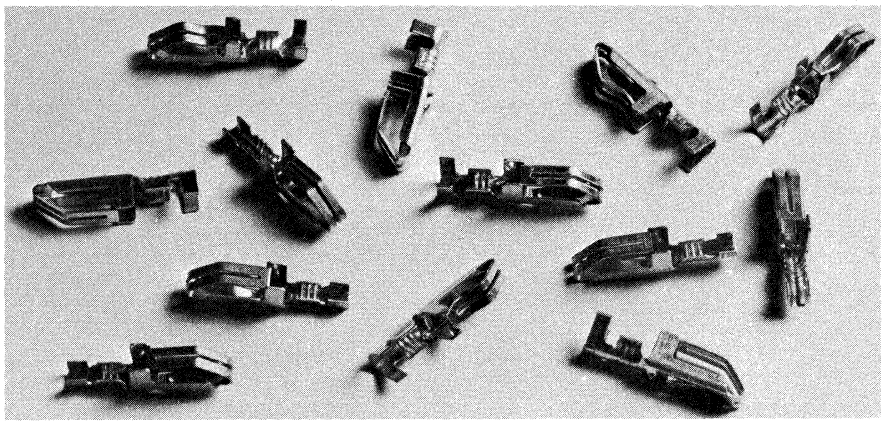
Ordering Information

Circuits	Order No. Without Flange	Order No. With Flange	Circuits	Order No. Without Flange	Order No. With Flange	Circuits	Order No. Without Flange	Order No. With Flange
6	09-01-1061	09-01-2061	15	09-01-1151	09-01-2151	22	09-01-1221	09-01-2221
9	09-01-1091	09-01-2091	18	09-01-1181	09-01-2181	24	09-01-1241	09-01-2241
12	09-01-1121	09-01-2121	21	09-01-1211	09-01-2211			

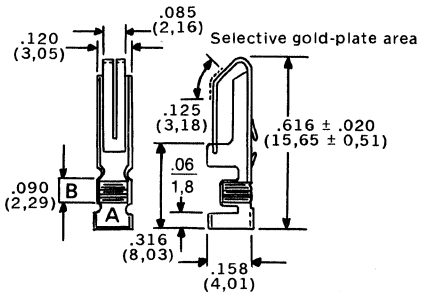
Single Sided Edge Connector Terminals

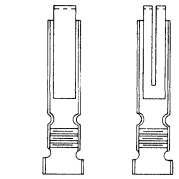
1797, 1917, 2012, 2014, and 4295 Crimp Terminals

- For use with 1796 housing
- Crimp wire size 18-30 AWG
- Contact material, brass or phosphor bronze
- Pre-tinned or gold plate
- Patented bifurcated contact

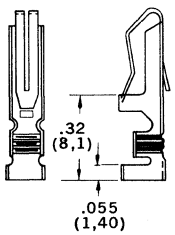


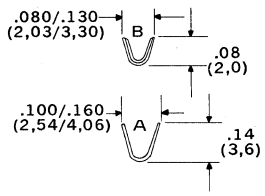
F





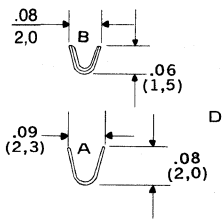
inches
mm





Conductor Crimp Area
1797, 1917, 2012, 4295

Insulation Crimp Area



2014

Dimensions common except as shown

Ordering Information

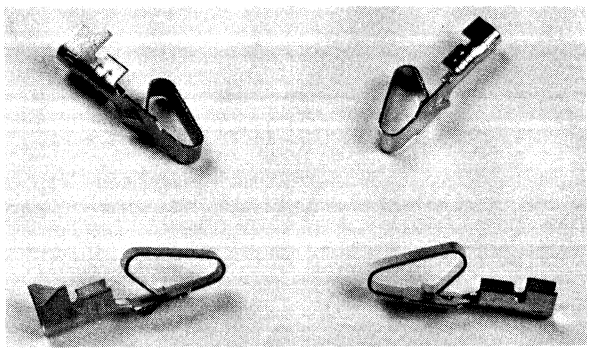
Crimp Wire Size	Insulation Diameter	Eng. No.	Order Number	
			Chain Form	Loose Form
18-24	.060-.120 1,52-3,05	1797 (a)	08-01-0101	08-01-0102
		1797 (b)	08-05-0103	08-05-0104
		1797 (c)	08-06-0101	08-06-0102
		1917 (d)	08-03-0101	08-03-0102
		1917 (e)	08-07-0101	08-07-0102
		*2012 (a)	08-01-0110	08-01-0111
		4295 (a)	08-01-0112	08-01-0113
24-30	.040-.090 1,02-2,29	2014 (a)	08-01-0105	08-01-0106
		2014 (b)	08-05-0105	—
		2014 (c)	08-06-0105	08-06-0106

* Non-bifurcated.
(a) Tin-plated.
(b) .00003 (0,0008mm) minimum selective gold plate over .00003 (0,0008mm) minimum nickel-plated brass.
(c) .00002 (0,0005mm) minimum gold plate over .00003 (0,0008mm) minimum nickel-plated brass.
(d) Tin-plated phosphor bronze.
(e) .00002 (0,0005mm) minimum gold plate over .00003 (0,0008mm) minimum nickel-plated phosphor bronze.

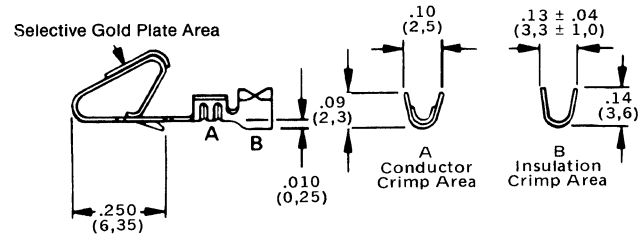
For application tooling see Section M of this catalog.

2478, 2578 and 2878
Crimp Terminals for Single Sided Housings

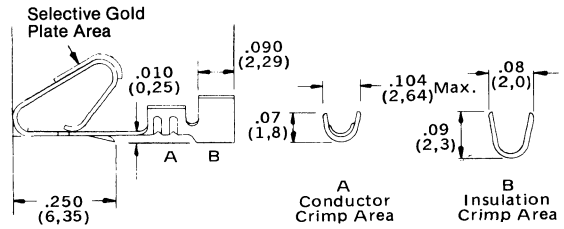
- For use with 2574 housing
- Crimp wire size 18-26 AWG
- Contact material brass
- Tin, bright acid tin or gold plate
- Patented double cantilever design



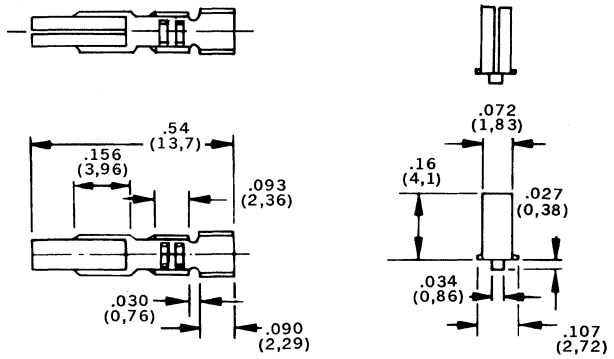
2478, 2878
For 18-24 AWG Only



2578
For 22-28 AWG



2878 Bifurcated Version
For 18-24 AWG



inches
mm

Tooling Specifications and Ordering Information

Terminal Eng. No.	Hand Tools		Crimp Machine	
	Crimping Order and (Eng.) No.	Extraction Order and (Eng.) No.	Bench Order and (Eng.) No.	Automatic Type
	(JHTR-2445-A)	(HTA-2174)	(TM-40D)	
2478	11-01-0026	11-03-0016	11-04-0418	KM40S
2578(a)			11-04-0420	
2878			11-04-0418	

Specifications and Ordering Information 2478/2578/2878

Crimp Wire Size	Insulation Diameter (Max.)	Eng. No.	Order Number		Plating
			Loose	Chain	
18-24	.110 2,79	2478	• 08-50-0106	• 08-50-0105	Tin
18-24	.110 2,79	2478	• 08-56-0106	• 08-56-0105	Gold
18-24	.110 2,79	2478	• 08-55-0104	• 08-55-0103	Sel. Gold
18-24	.110 2,79	2878	• 08-50-0116	• 08-50-0115	Tin
22-28	.065 1,65	2578	• 08-50-0108	• 08-50-0107	Tin
22-28	.065 1,65	2578	• 08-55-0106	• 08-55-0105	Sel. Gold

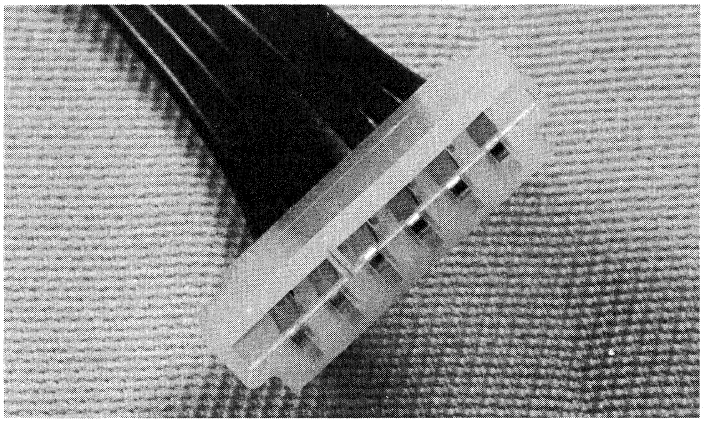
• U.S. Standard Product, available through Molex franchised distributors

.156" 3.96 mm Center Single Sided Edge Connector Housing

molex®

2574

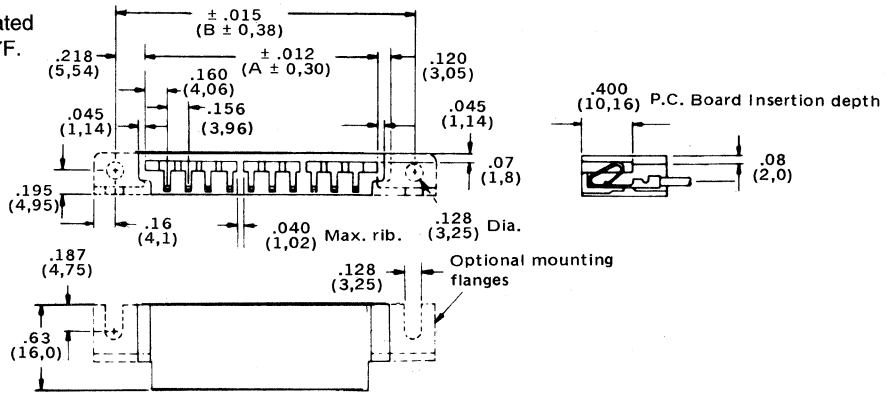
Polarized Edge Connector Housings for Crimp Terminals



- .156" centers
- 94V-2 nylon material
- Optional mounting flanges
- Polarization provided by structural ribs
- Uses optional bifurcated terminals
- Will accept .062" thick P.C. boards
- IDC version (7241 product)

F

Terminals: 2478, 2578 or bifurcated 2878; Order separately. See page 47F.



Dimensions

Circuits	Dim. A	Dim. B	Center Ribs Between Circuits	Circuits	Dim. A	Dim. B	Center Ribs Between Circuits
3	.632 16,05	1.14 29,0		9(d)	1.568 39,83	2.00 50,8	3 & 4 and 5 & 6
4	.788 20,02	1.30 33,02		10(e)	1.724 43,79	2.16 54,9	4 & 5 and 7 & 8
5	.944 23,98	1.38 35,1		12(k)	2.036 51,71	2.47 62,74	5 & 6 and 8 & 9
6	1.100 27,94	1.54 39,1		15(f)	2.504 63,60	2.94 74,7	4 & 5, 7 & 8 and 11 & 12
6(a)	1.100 27,94	1.54 39,1	2 & 3	16(h)	2.600 ± .012 67,56 ± 0,30	3.096 ± .015 78,64 ± 0,38	4 & 5, 7 & 8, 11 & 12 and 15 & 16
7(b)	1.256 31,90	1.69 42,9	3 & 4	17(l)	2.816 71,53	3.25 82,55	5 & 6, 10 & 11 and 14 & 15
8	1.412 35,86	1.85 47,0		18(g)	2.972 75,49	3.41 86,6	5 & 6 and 10 & 11
8(a)	1.412 35,86	1.85 47,0	2 & 3	19(n)	3.128 79,45	3.56 90,4	5 & 6, 11 & 12 and 16 & 17
8(b)	1.412 35,86	1.85 47,0	3 & 4	21(m)	3.440 ± .015 87,38 ± 0,38	3.88 ± .015 98,55 ± 0,38	5 & 6, 10 & 11 and 15 & 16
8(c)	1.412 35,86	1.85 47,0	5 & 6	22(n)	3.596 ± .015 91,34 ± 0,38	4.03 ± .020 102,36 ± 0,51	5 & 6, 11 & 12 and 16 & 17
9 (a)	1.568 39,83	2.00 50,8	2 & 3	24(j)	3.908 ± .020 99,26 ± 0,51	4.34 ± .020 110,2 ± 0,50	4 & 5, 8 & 9, 12 & 13, 16 & 17, 20 & 21
9(c)	1.568 39,83	2.00 50,8	5 & 6				

Ordering Information

Circuits	Order No. W/O Flange	Order No. With Flange	Circuits	Order No. W/O Flange	Order No. With Flange	Circuits	Order No. W/O Flange	Order No. With Flange	Circuits	Order No. W/O Flange	Order No. With Flange
3	09-01-6031	09-01-7031	8	—	09-01-7081	9(d)	09-01-6091	09-01-7091	18(g)	09-01-6181	09-01-7181
4	09-01-6041	—	8(a)	09-01-6085	—	10(e)	09-01-6101	09-01-7101	19(n)	09-01-6191	09-01-7191
5	09-01-6051	09-01-7051	8(b)	09-01-6086	—	12(k)	09-01-6121	—	21(m)	09-01-6211	09-01-7211
6	—	09-01-7064	8(c)	09-01-6083	09-01-7083	15(f)	09-01-6151	09-01-7151	22(n)	09-01-6224	09-01-7224
6(a)	09-01-6061	09-01-7061	9(a)	09-01-6095	09-01-7095	16(h)	09-01-6161	09-01-7161	24(j)	09-01-6241	09-01-7241
7(b)	09-01-6071	09-01-7071	9(c)	09-01-6094	09-01-7094	17(l)	09-01-6171	09-01-7171			

Note: Use KK® terminal 2578 for 22-26 AWG wire, or 2478 and 2878 (Bifurcated) for 18-24 AWG with .110" (2,79mm) diameter maximum insulation.

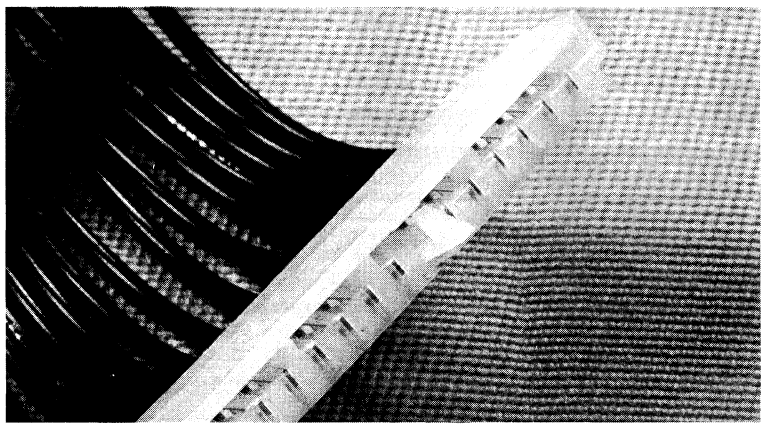
.156" 3.96 mm Center Single Sided Edge Connector Housing

6422

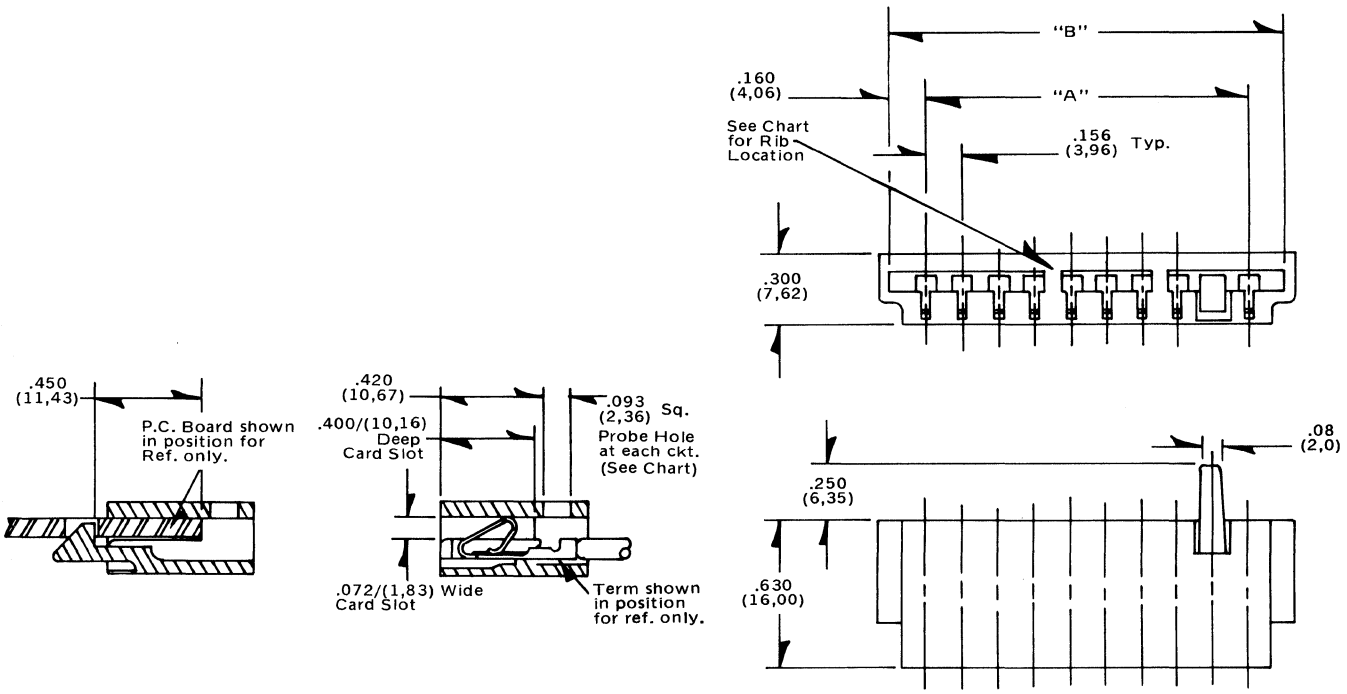
Polarized Edge Connector Housing with Positive Lock

- 94V-2 nylon
- Polarization provided by structural ribs
- Optional bifurcated terminals
- Will accept .062" thick (1,57mm) P.C. boards
- Optional probe hole

Terminals: 2478, 2578 or bifurcated 2878; Order separately. See page 47F.



F



Dimensions

Circuits*	Rib Loc. Between Ckts.	Hook Loc. Between Ckts.	Dim. A	Dim. B	Circuits*	Rib. Loc. Between Ckts.	Hook Loc. Between Ckts.	Dim. A	Dim. B
3	None	1 & 3	.312 ± .007 7,92 ± 0,18	.632 ± .007 16,05 ± 0,18	10	4 & 5, 7 & 8	8 & 10	1.404 ± .011 35,66 ± 0,28	1.724 ± .011 43,79 ± 0,28
5	None	1 & 3	.624 ± .009 15,85 ± 0,23	.944 ± .009 23,98 ± 0,23	12	6 & 7	8 & 10	1.716 ± .011 43,58 ± 0,28	2.036 ± .007 51,71 ± 0,18
6	None	1 & 3	.780 ± .009 18,81 ± 0,23	1.100 ± .009 27,94 ± 0,23	15	4 & 5, 7 & 8 11 & 12	8 & 10	2.184 ± .013 55,47 ± 0,33	2.504 ± .013 63,61 ± 0,33
9	3 & 4, 5 & 6	3 & 5	1.248 ± .011 31,67 ± 0,28	1.568 ± .011 39,80 ± 0,28	21	5 & 6, 10 & 11 15 & 16	8 & 10	3:120 ± .018 79,25 ± 0,46	3.440 ± .018 87,38 ± 0,46

Ordering Information

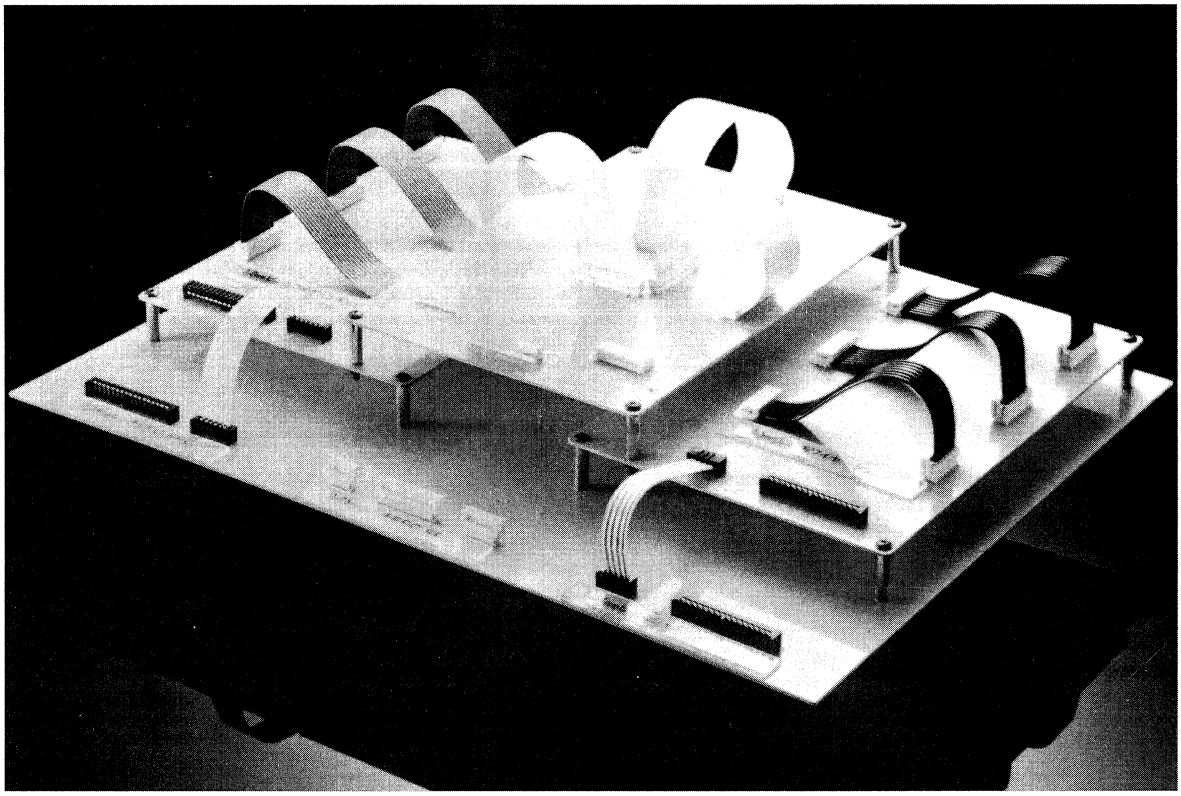
Circuits*	Order No. With Probe Hole	Order No. Without Probe Hole	Circuits*	Order No. With Probe Hole	Order No. Without Probe Hole	Circuits*	Order No. With Probe Hole	Order No. Without Probe Hole
3	—	09-01-1038	9	09-01-1096	09-01-1098	15	—	09-01-1158
5	09-01-1056	09-01-1058	10	—	09-01-1108	21	09-01-1216	09-01-1218
6	—	09-01-1068	12	—	09-01-1128			

*One circuit lost to provide locking hook; i.e., 3 circuit accepts two terminals only.

Notes

Connectors and Jumpers for FFC, FPC, and Ribbon Cable

Contents



2.5 mm (.098")

Wire Trap Connectors for Ribbon Cable 2G
Ribbon Cable Holder 3G
Cable Wire Holder 4G

.100" (2.54 mm)

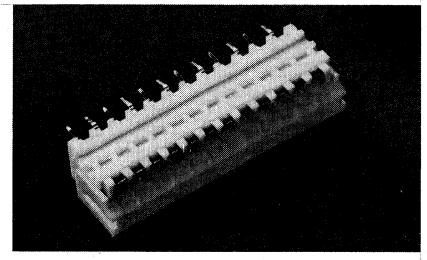
Flex-C-Term Connector 5G
FFC/FPC Connectors ..... 6G - 11G
Ribbon Cable Connector ..... 12G - 13G

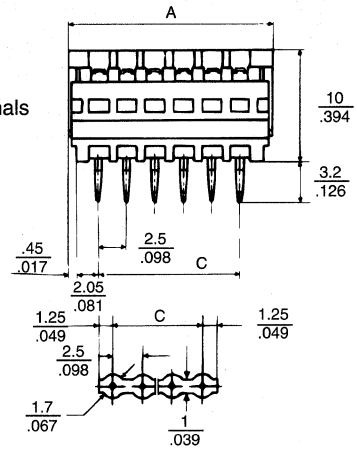
G

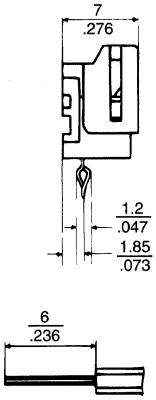
.098" 2.5 mm Center Wire Trap

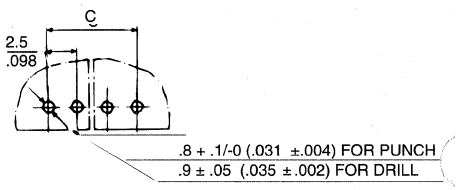
52011 Series
Push-Cover Style Straight

- ☐ Glass filled polyester, UL 94V-0
- ☐ Tin plated phosphor bronze terminals
- ☐ 2-12 circuits
- ☐ 250V, 3 Amp. max.
- ☐ For topcoated ribbon cable
- ☐ Wire range: AWG #24 - #26
- ☐ Insulation diameter: 1.7 mm max.
- ☐ Strip length: 6 mm









mm
inches

Cable Dimensions

PCB Layout

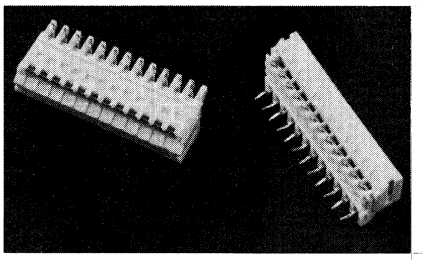
G

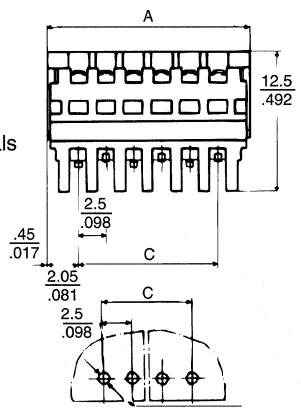
Ordering Information and Dimensions

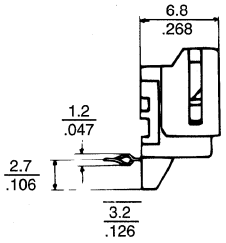
Circuits	Order No.	Dim. A		Dim. C		Circuits	Order No.	Dim. A		Dim. C	
2	52011-0210	8.10	.319	2.50	.980	8	52011-0810	23.10	.909	17.50	.689
3	52011-0310	10.60	.417	5.00	.197	9	52011-0910	25.60	1.008	20.00	.787
4	52011-0410	13.10	.516	7.50	.295	10	52011-1010	28.10	1.106	22.50	.886
5	52011-0510	15.60	.614	10.00	.394	11	52011-1110	30.60	1.204	25.00	.985
6	52011-0610	18.10	.713	12.50	.492	12	52011-1210	33.10	1.303	27.50	1.083
7	52011-0710	20.60	.811	15.00	.591						

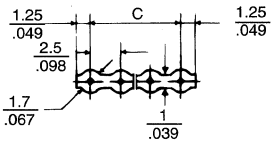
52012 Series
Push-Cover Style Right Angle

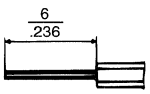
- ☐ Glass filled polyester, UL 94V-0
- ☐ Tin plated phosphor bronze terminals
- ☐ 2-12 circuits
- ☐ 250V, 3 Amp. max.
- ☐ For topcoated ribbon cable
- ☐ Wire range: AWG #24 - #26
- ☐ Insulation diameter: 1.7 mm max.
- ☐ Strip length: 6 mm











mm
inches

.8 + .1/-0 (.031 ±.004) FOR PUNCH
.9 ± .05 (.035 ± .002) FOR DRILL

PCB Layout

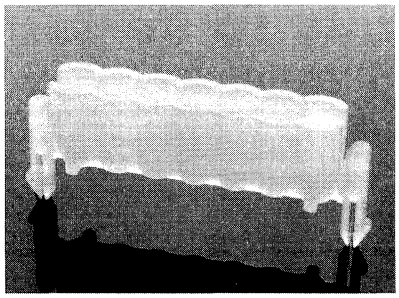
Cable Dimensions

Ordering Information and Dimensions

Circuits	Order No.	Dim. A		Dim. C		Circuits	Order No.	Dim. A		Dim. C	
2	52012-0210	8.10	.319	2.50	.098	8	52012-0810	23.10	.909	17.50	.689
3	52012-0310	10.60	.417	5.00	.197	9	52012-0910	25.60	1.008	20.00	.787
4	52012-0410	13.10	.516	7.50	.295	10	52012-1010	28.10	1.106	22.50	.886
5	52012-0510	15.60	.614	10.00	.394	11	52012-1110	30.60	1.204	25.00	.985
6	52012-0610	18.10	.713	12.50	.492	12	52012-1210	33.10	1.303	27.50	1.083
7	52012-0710	20.60	.811	15.00	.591						

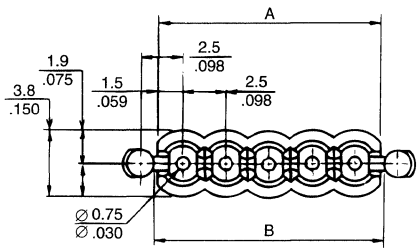
.098" 2.5 mm Center Ribbon Cable Holder

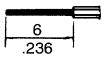
51052 Series
Straight

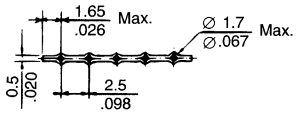


- ☐ Nylon 6/6, UL 94V-2
- ☐ 2-16 circuits
- ☐ For topcoated ribbon cable
- ☐ Wire range: AWG #24-#26
- ☐ Insulation diameter: 1.7 mm max.
- ☐ Strip length: 6 mm

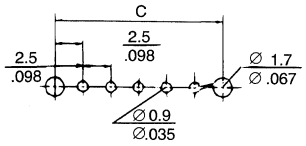
mm
inches



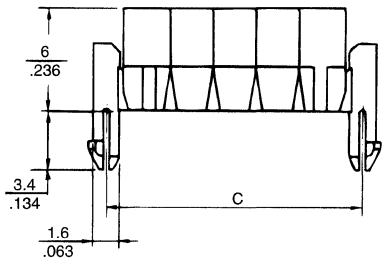


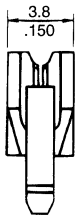


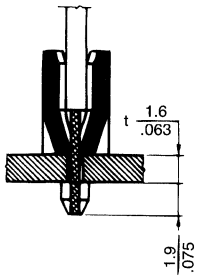
CABLE



PCB Layout







G

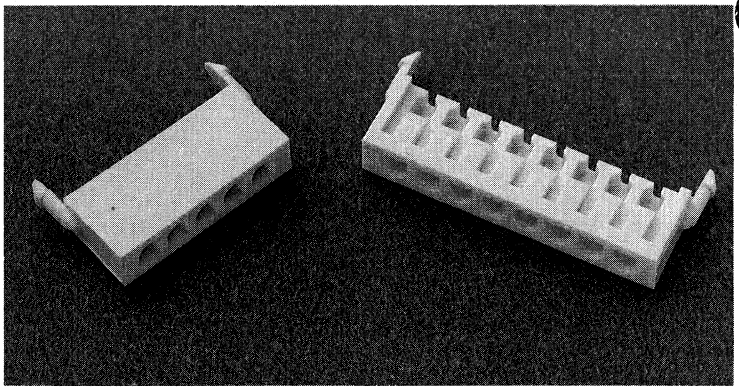
Ordering Information and Dimensions

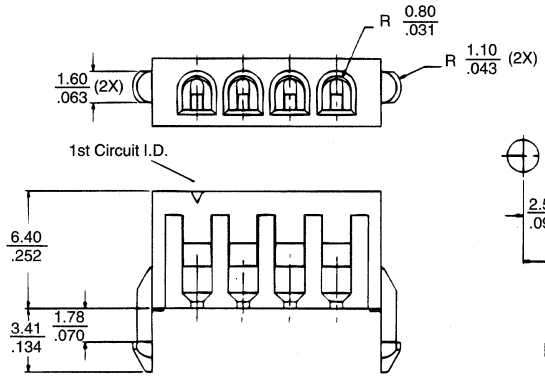
Circuits	Order No.	Dim. A	Dim. B	Dim. C	Circuits	Order No.	Dim. A	Dim. B	Dim. C
2	51052-0200	5.50 .217	5.90 .232	7.50 .295	10	51052-1000	25.50 1.004	25.90 1.020	27.50 1.083
3	51052-0300	8.00 .315	8.40 .331	10.00 .394	11	51052-1100	28.00 1.102	28.40 1.118	30.00 1.181
4	51052-0400	10.50 .413	10.90 .429	12.50 .492	12	51052-1200	30.50 1.201	30.90 1.217	32.50 1.280
5	51052-0500	13.50 .531	13.40 .528	15.00 .590	13	51052-1300	33.00 1.299	33.40 1.315	35.00 1.378
6	51052-0600	15.50 .610	15.90 .626	17.50 .689	14	51052-1400	35.50 1.398	35.90 1.413	37.50 1.476
7	51052-0700	18.00 .709	18.40 .724	20.00 .787	15	51052-1500	38.00 1.496	38.40 1.512	40.00 1.575
8	51052-0800	20.50 .807	20.90 .823	22.50 .886	16	51052-1600	40.50 1.594	40.90 1.610	42.50 1.673
9	51052-0900	23.00 .906	23.40 .921	25.00 .984					

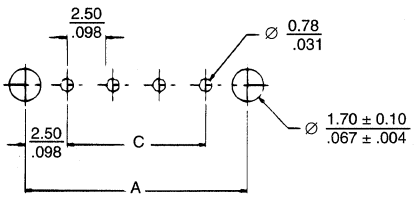
.098" 2.5 mm Center Cable / Wire Holder

87130 Series
Straight

- ☐ Accepts topcoated ribbon cable or discrete wire
- ☐ Nylon 6/6, UL 94 V-0
- ☐ 2-20 circuits
- ☐ Wire range: AWG #24-26
- ☐ Strip length: 4 mm



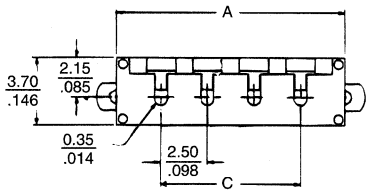




PCB Layout

PCB Thickness: 1.57mm

mm
inches



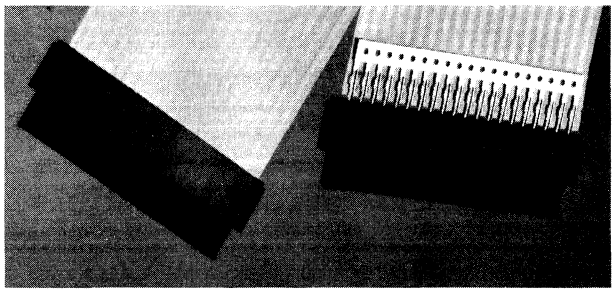
Ordering Information and Dimensions

Circuits	Order No.	Dim. A		Dim. C		Circuits	Order No.	Dim. A		Dim. C	
2	87130-0200	7.50	.295	2.50	.098	12	87130-1200	32.50	1.280	27.50	1.083
3	87130-0300	10.00	.394	5.00	.197	13	87130-1300	35.00	1.378	30.00	1.181
4	87130-0400	12.50	.492	7.50	.295	14	87130-1400	37.50	1.476	32.50	1.280
5	87130-0500	15.00	.591	10.00	.394	15	87130-1500	40.00	1.575	35.00	1.378
6	87130-0600	17.50	.689	12.50	.492	16	87130-1600	42.50	1.673	37.50	1.476
7	87130-0700	20.00	.787	15.00	.591	17	87130-1700	45.00	1.772	40.00	1.575
8	87130-0800	22.50	.886	17.50	.689	18	87130-1800	47.50	1.870	42.50	1.673
9	87130-0900	25.00	.984	20.00	.787	19	87130-1900	50.00	1.969	45.00	1.772
10	87130-1000	27.50	1.083	22.50	.886	20	87130-2000	52.50	2.067	47.50	1.870
11	87130-1100	30.00	1.181	25.00	.984						

.100" 2.54 mm Center Flex-C-Term™ Connector

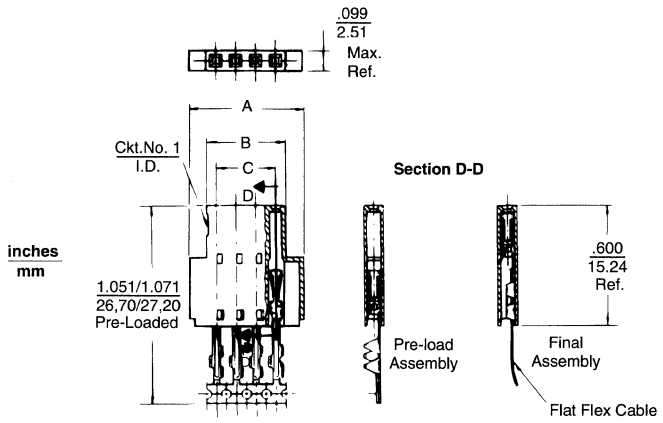
40556 Series

- □ Terminates membrane switches, flat connector flat cable, and flexible circuitry
- □ Insulation piercing terminals preassembled into housing
- □ Stripping of insulation not required
- □ Mates with .025" pins and Molex 70431 Series male connector
- □ Positive locking option available
- □ Circuit sizes 4-27



Left - Membrane switch tail fully seated and secured in housing. Connector ready to plug onto .025" pins.

Right - Product shown terminated to membrane switch tail prior to seating.



Reference only. Contact factory for detailed specifications and drawings

Specifications

Housing : 94V-0 polyester
Terminals : Copper alloy
Tin Plating : 200 microinches min. tin over 100 microinches copper
Gold Plating : 15 microinches gold in contact area. Min. 75 microinches tin/lead in termination area both over 50 microinches nickel
Mating Pin Length : .200" min., .320" max.
Accepts cable thickness from .005" to .012"
Accepts trace widths of .040" to .062"
Min. cable tail length .750"
Current Rating : 1 amp with copper conductors

G

Ordering Information and Dimensions

Circuits	Order No. Tin	Order No. Gold	Dim. A	Dim. B	Dim. C
4	• 22-41-9043	• 22-51-9043	.580 14.74	.399 10.13	.300 7.62
5	• 22-41-9053	• 22-51-9053	.680 17.28	.499 12.67	.400 10.16
6	• 22-41-9063	• 22-51-9063	.780 19.82	.599 15.21	.500 12.70
7	• 22-41-9073	• 22-51-9073	.880 22.36	.699 17.75	.600 15.24
8	• 22-41-9083	• 22-51-9083	.980 24.90	.799 20.29	.700 17.78
9	• 22-41-9093	• 22-51-9093	1.080 27.44	.899 22.83	.800 20.32
10	• 22-41-9103	• 22-51-9103	1.180 29.98	.999 25.37	.900 22.86
11	• 22-41-9113	• 22-51-9113	1.280 32.52	1.099 27.91	1.000 25.40
12	• 22-41-9123	• 22-51-9123	1.380 35.06	1.199 30.45	1.100 27.94
13	• 22-41-9133	• 22-51-9133	1.480 37.60	1.299 32.99	1.200 30.48
14	• 22-41-9143	• 22-51-9143	1.580 40.14	1.399 35.53	1.300 33.02
15	• 22-41-9153	• 22-51-9153	1.680 42.68	1.499 38.07	1.400 35.56
16	• 22-41-9163	• 22-51-9163	1.780 45.22	1.599 40.61	1.500 38.10
17	• 22-41-9173	• 22-51-9173	1.880 47.76	1.699 43.15	1.600 40.64
18	• 22-41-9183	• 22-51-9183	1.980 50.30	1.799 45.69	1.700 43.18
19	• 22-41-9193	• 22-51-9193	2.080 52.84	1.899 48.23	1.800 45.72
20	• 22-41-9203	• 22-51-9203	2.180 55.38	1.999 50.77	1.900 48.26
21	• 22-41-9213	• 22-51-9213	2.280 57.92	2.099 53.31	2.000 50.80
22	• 22-41-9223	• 22-51-9223	2.380 60.46	2.199 55.85	2.100 53.34
23	• 22-41-9233	• 22-51-9233	2.480 63.00	2.299 58.39	2.200 55.88
24	• 22-41-9243	• 22-51-9243	2.580 65.54	2.399 60.93	2.300 58.42
25	• 22-41-9253	• 22-51-9253	2.680 68.08	2.499 63.47	2.400 60.96
26	• 22-41-9263	• 22-51-9263	2.780 70.62	2.599 66.01	2.500 63.50
27	• 22-41-9273	• 22-51-9273	2.880 73.16	2.699 68.55	2.600 66.04

• U.S. Standard Product, available through Molex franchised distributors

Arbor Press Termination Tooling

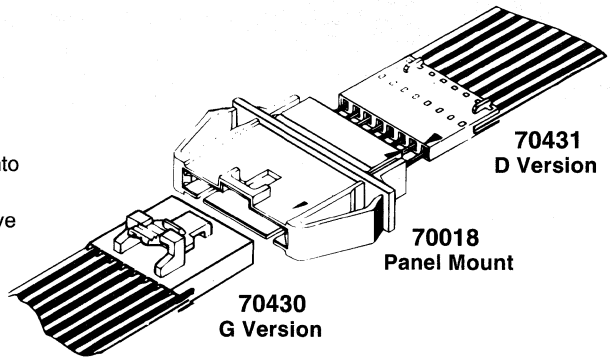
Type	Eng. No.	Order No.
Manual	HCM8564AD	11-04-0592
Pneumatic	CM8564E	11-04-0617

For use with Flex-C Term Connector
Universal Polarizing Peg
40713-1
Order No. 15-04-0292
Actual Size
Delivered on a carrier with 20 pieces per strip.

.100" 2.54 mm Center FFC/FPC Connectors

70430/70431 Series
Modular Connectors for Planar Circuitry

- For use with C-Grid single row shrouded headers and clips
- Features piercing crimp which provides three high pressure interfaces with the conductor
- Housing completely surrounds planar substrate
- Terminals preloaded into housing
- Polarization and positive locking options
- Circuit sizes 2-25
- Application Tooling available. See 40556 Series, previous page



Specifications

Housing: 94V-0 polyester

Terminals: Phosphor bronze alloy

Tin Plating: 200 microinches min. tin over 100 microinches copper

Gold Plating: 15 microinches min. selective gold in contact area with 75 microinches min. tin/lead in the termination area over 50 microinches min. nickel overall

30 microinches min. selective gold in contact area with 75 microinches min. tin/lead in the termination area over 50 microinches min. nickel overall

Flat Flexible Cable/ Printed Circuit: Copper conductors on .100" centers to be .062" +/- .003" wide x .003" thick (#26 AWG). Total cable thickness should not exceed .014" thick.

Silver ink on .100" centers to be .065"/.040" wide on .005"/.011" thick mylar

Cable length required to successfully terminate assemblies in Molex equipment is 1.0" min.

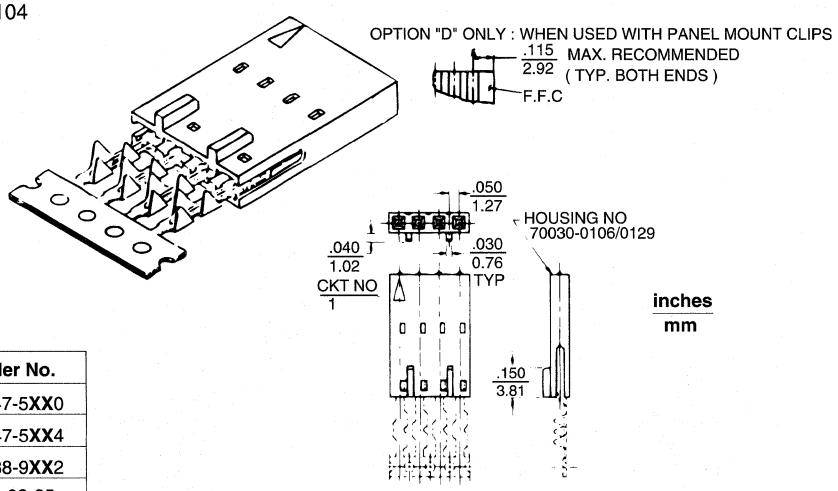
NOTE: The 70430 Series connectors are compatible with all copper conductors and conductive ink circuitry which meets the following specifications: IPC (Institute of Printed Circuits) FC-220B, tolerance classes III and IV

Current Rating:* Copper conductor cable or circuits, 2.0 amps max. Silver ink conductor cable or circuits, 500 milliamps max.

*Current rating is limited by the cable used. The connector assembly is capable of carrying 3 amps per conductor.

70431 Series Male
D Version

- Stackable end-to-end
- Back ribs prevent movement when used within interim clip or panel mount housings
- Mates with female connectors on .100" centers and 70018, 70022, and 70104



Ordering Information

Plating	Order No.
15 microinches gold	15-47-5**XX**0
30 microinches gold	15-47-5**XX**4
200 microinches overall tin	15-38-9**XX**2
Replace **XX** with number of circuits, 02-25	

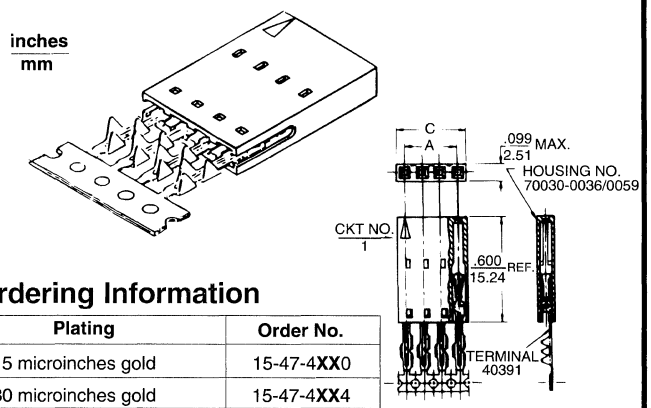
.100" 2.54 mm Center FFC/FPC Connector

molex

70430 Series Female

A Version

- Stackable end-to-end and side-by-side
- Mates with .100" center single-or dual-row headers or pins in the P.C. board.

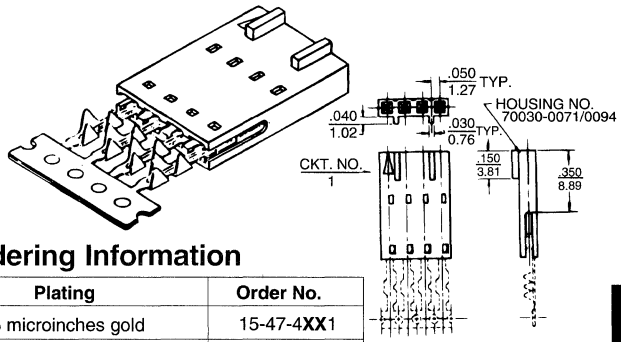


Ordering Information

Plating	Order No.
15 microinches gold	15-47-4**XX**0
30 microinches gold	15-47-4**XX**4
200 microinches overall tin	15-38-8**XX**8
Replace **XX** with number of circuits, 02-25	

C Version

- Stackable side-by-side
- Mates with 70544, 70546, 70554, and 70556 straight and right angle polarized headers
- Front polarizing ribs prevent pin damage during disconnect. Housing cannot be twisted off pins.



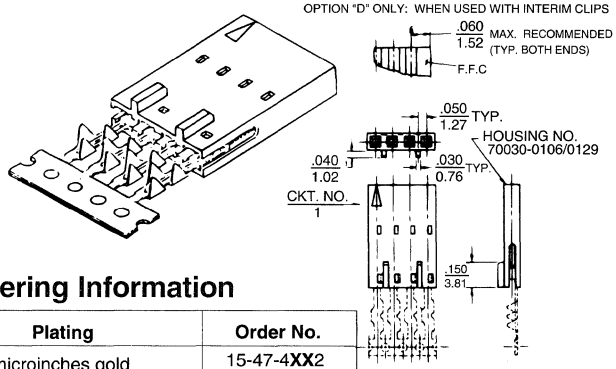
Ordering Information

Plating	Order No.
15 microinches gold	15-47-4**XX**1
30 microinches gold	15-47-4**XX**5
200 microinches overall tin	15-38-8**XX**7
Replace **XX** with number of circuits, 02-25	

G

D Version

- Mates with 70004 and 70013 single-and dual-row interim clips, panel mounts
- Back polarizing ribs prevent the assembly from drifting within the interim clip when another module is removed.

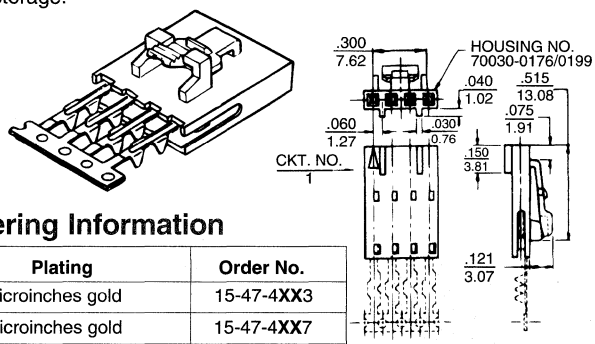


Ordering Information

Plating	Order No.
15 microinches gold	15-47-4**XX**2
30 microinches gold	15-47-4**XX**6
200 microinches overall tin	15-38-8**XX**9
Replace **XX** with number of circuits, 02-25	

G Version

- Stackable side-by-side
- Mates with C-Grid locking headers, interim clips and panel mounts
- Stackable end-to-end
- Positive latch secures connector to mating part
- Anti-entanglement ribs prevent discrete wires from catching under latch during harness manufacturing and storage.



Ordering Information

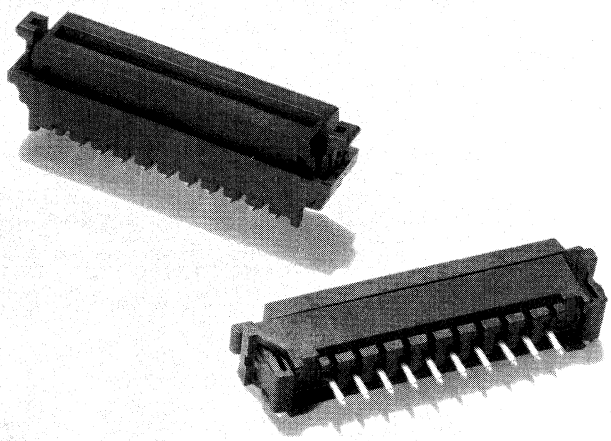
Plating	Order No.
15 microinches gold	15-47-4**XX**3
30 microinches gold	15-47-4**XX**7
200 microinches overall tin	15-38-8**XX**0
Replace **XX** with number of circuits, 02-25	

Dimensions

Ckts.	Dim. A		Dim. C		Ckts.	Dim. A		Dim. C		Ckts.	Dim. A		Dim. C	
2	.100	2.54	.199	5.05	10	.900	22.86	.999	25.37	18	1.700	43.18	1.799	45.69
3	.200	5.08	.299	7.59	11	1.000	25.40	1.099	27.91	19	1.800	45.72	1.899	48.23
4	.300	7.62	.399	10.13	12	1.100	27.94	1.199	30.45	20	1.900	48.26	1.999	50.77
5	.400	10.16	.499	12.67	13	1.200	30.48	1.299	32.99	21	2.000	50.80	2.099	53.31
6	.500	12.70	.599	15.21	14	1.300	33.02	1.399	35.53	22	2.100	53.34	2.199	55.85
7	.600	15.24	.699	17.75	15	1.400	35.56	1.499	38.07	23	2.200	55.88	2.299	58.39
8	.700	17.78	.799	20.29	16	1.500	38.10	1.599	40.61	24	2.300	58.42	2.399	60.93
9	.800	20.32	.899	22.83	17	1.600	40.64	1.699	43.15	25	2.400	60.69	2.499	63.47

.100" 2.54 mm Center FFC/FPC Connectors

90500 Series
ZIF, Straight and Right Angle



- □ Zero insertion force (ZIF)
- □ Dual beam contact
- □ 4-20 circuits
- □ Audible click when cover closed
- □ For 0.2mm thick FFC/FPC

Specifications:

Housing: UL 94V-0 glass filled black polyester

Contact: Phosphor bronze

Plating: Tin

Operating Temp: -40°C to +85°C

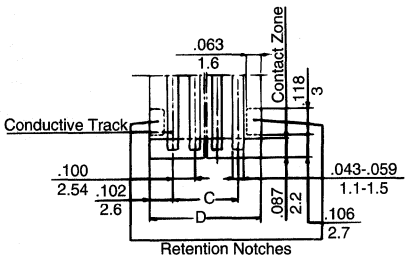
Current Rating: 3 amp max./ckt. at 20° C (tin/copper cable)

Voltage Rating: 250 Vdc

Contact Resistance: 30 milliohms max. (tin/copper cable)

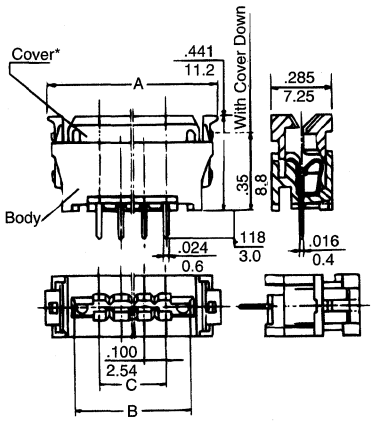
G

inches
mm



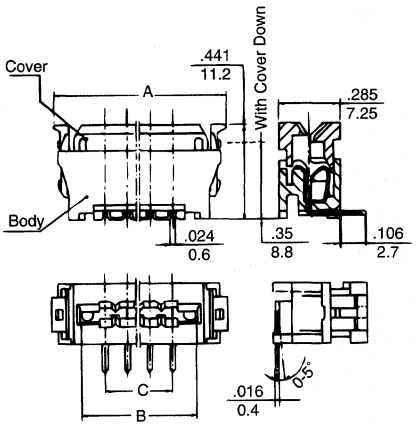
Flat Flex Circuitry Preparation

Straight Version

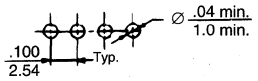


Straight Version

Right Angle Version



Right Angle Version



PCB Layout

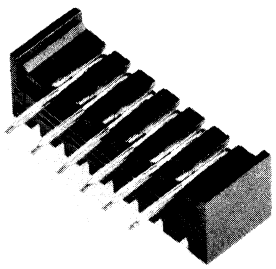
Ordering Information and Dimensions

Circuits	Order No.		Dim. A		Dim. B		Dim. C		Dim. D	
	Straight	Right Angle								
4	90500-0004	90500-0104	.887	22.52	.509	12.92	.300	7.62	.505	12.82
5	90500-0005	90500-0105	.987	25.06	.609	15.46	.400	10.16	.605	15.36
6	90500-0006	90500-0106	1.087	27.60	.709	18.00	.500	12.70	.705	17.90
7	90500-0007	90500-0107	1.187	30.14	.809	20.54	.600	15.24	.805	20.44
8	90500-0008	90500-0108	1.287	32.68	.909	23.08	.700	17.78	.905	22.98
9	90500-0009	90500-0109	1.387	35.22	1.009	25.62	.800	20.32	1.005	25.52
10	90500-0010	90500-0110	1.487	37.76	1.109	28.16	.900	22.86	1.105	28.06
11	90500-0011	90500-0111	1.587	40.30	1.209	30.70	1.000	25.40	1.205	30.60
12	90500-0012	90500-0112	1.687	42.84	1.309	33.24	1.100	27.94	1.305	33.14
13	90500-0013	90500-0113	1.787	45.38	1.409	35.78	1.200	30.48	1.405	35.68
14	90500-0014	90500-0114	1.887	47.92	1.509	38.32	1.300	33.02	1.505	38.22
15	90500-0015	90500-0115	1.987	50.46	1.609	40.86	1.400	35.56	1.605	40.76
16	90500-0016	90500-0116	2.087	53.00	1.709	43.40	1.500	38.10	1.705	43.30
17	90500-0017	90500-0117	2.187	55.54	1.809	45.94	1.600	40.64	1.805	45.84
18	90500-0018	90500-0118	2.287	58.08	1.909	48.48	1.700	43.18	1.905	48.38
19	90500-0019	90500-0119	2.387	60.62	2.009	51.02	1.800	45.72	2.005	50.92
20	90500-0020	90500-0120	2.487	63.16	2.109	53.56	1.900	48.26	2.105	53.46

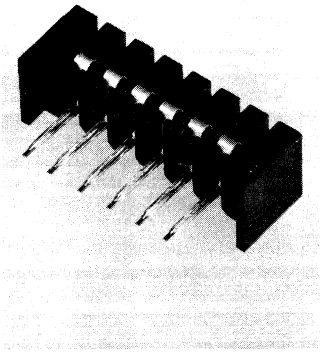
.100" 2.54 mm Center FFC/FPC Connectors

5229 NCPB, Straight
5229 NAPB, Right Angle
Low Profile

- ☐ Glass filled polyester, UL 94V-0
- ☐ Tin plated phosphor bronze terminals
- ☐ 3 -27 circuits
- ☐ Low insertion force (LIF)
- ☐ For 0.3 mm thick FFC/FPC
- ☐ Also accepts conductive ink circuit (membrane switch)
- ☐ Completely eliminates flux intrusion



Straight Tail

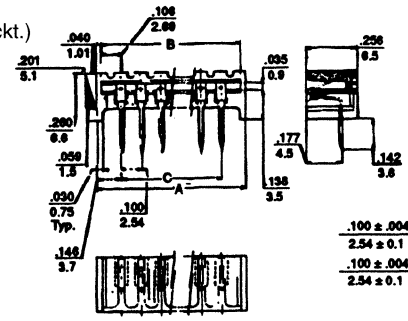


Right Angle Tail

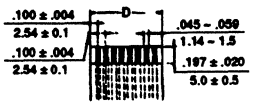
Specifications and Dimensions

Max. Insertion Force: Newtons (4.9 + 2.9 x ckt.)
Lbs. (1.1 + 0.66 x ckt.)
Kg. (0.5 + 0.3 x ckt.)

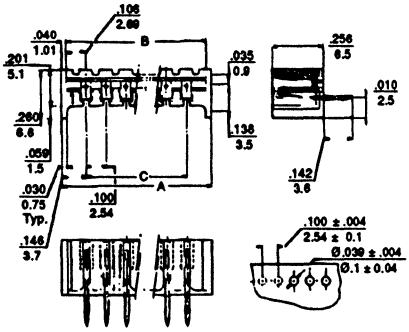
Min. Intitial Extraction Force: Newtons (0.24 x ckt.)
Lbs. (0.05 x ckt.)
Kg. (0.024 x ckt.)



5229 NAPB



Recommended FFC



5229 NCPB

PCB Layout

G

Ordering Information and Dimensions

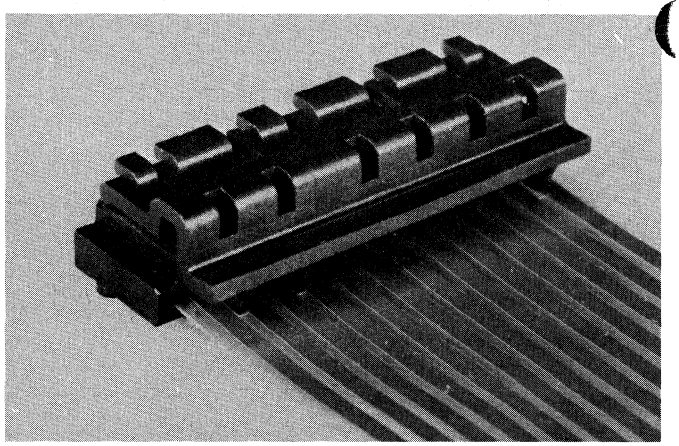
Circuits	Order No.		Dim. A		Dim. B		Dim. C		Dim. D	
	Straight	Right Angle								
3	22-02-3033	22-15-3033	.491	12.48	.412	10.46	.200	5.08	.400	10.16
4	22-02-3043	22-15-3043	.591	15.02	.512	13.00	.300	7.62	.500	12.70
5	22-02-3053	22-15-3053	.691	17.56	.612	15.54	.400	10.16	.600	15.24
6	22-02-3063	22-15-3063	.791	20.10	.712	18.08	.500	12.70	.700	17.78
7	22-02-3073	22-15-3073	.891	22.64	.812	20.62	.600	15.24	.800	20.32
8	22-02-3083	22-15-3083	.991	25.18	.912	23.16	.700	17.78	.900	22.86
9	22-02-3093	22-15-3093	1.091	27.72	1.012	25.70	.800	20.32	1.000	25.40
10	22-02-3103	22-15-3103	1.191	30.26	1.112	28.24	.900	22.86	1.100	27.94
11	22-02-3113	22-15-3113	1.291	32.80	1.212	30.78	1.000	25.40	1.200	30.48
12	22-02-3123	22-15-3123	1.391	35.34	1.312	33.32	1.100	27.94	1.300	33.02
13	22-02-3133	22-15-3133	1.491	37.88	1.412	35.86	1.200	30.48	1.400	35.56
14	22-02-3143	22-15-3143	1.591	40.42	1.512	38.40	1.300	33.02	1.500	38.10
15	22-02-3153	22-15-3153	1.691	42.96	1.612	40.94	1.400	35.56	1.600	40.64
16	22-02-3163	22-15-3163	1.791	45.50	1.712	43.48	1.500	38.10	1.700	43.18
17	22-02-3173	22-15-3173	1.891	48.04	1.812	46.02	1.600	40.64	1.800	45.72
18	22-02-3183	22-15-3183	1.991	50.58	1.912	48.56	1.700	43.18	1.900	48.26
19	22-02-3193	22-15-3193	2.091	53.12	2.012	51.10	1.800	45.72	2.000	50.80
20	22-02-3203	22-15-3203	2.191	55.66	2.112	53.64	1.900	48.26	2.100	53.34
21	22-02-3213	22-15-3213	2.291	58.20	2.212	56.18	2.000	50.80	2.200	55.88
22	22-02-3223	22-15-3223	2.391	60.74	2.312	58.72	2.100	53.34	2.300	58.42
23	22-02-3233	22-15-3233	2.491	63.28	2.412	61.26	2.200	55.88	2.400	60.96
24	22-02-3243	22-15-3243	2.591	65.82	2.512	63.80	2.300	58.42	2.500	63.50
25	22-02-3253	22-15-3253	2.691	68.36	2.612	66.34	2.400	60.96	2.600	66.04
26	22-02-3263	22-15-3263	2.791	70.90	2.712	68.88	2.500	63.50	2.700	68.58
27	22-02-3273	22-15-3273	2.891	73.44	2.812	71.42	2.600	66.04	2.800	71.12

.100" 2.54 mm Center Flat Flex Connector

4850

Flat Flexible Cable Connector

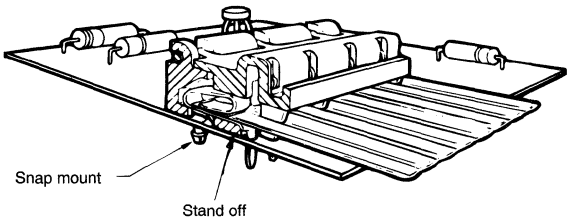
- ☐ Accepts flat conductor flexible cable or flat flexible circuitry on .100" centers
- ☐ Snaps into P.C. board with retaining locks
- ☐ Printed circuit board solder tail terminals
- ☐ Built-in polarized strain relief
- ☐ 5 - 25 circuits
- ☐ Low insertion force (LIF)
- ☐ Material 94V-0 glass filled polyester, terminal tin plated



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Design Features:

Pre-notched cable is inserted between the second arm and the base of the double cantilever terminal. Closing the cover of the connector actuates the cam. (See Fig.2) This forces the terminal contact area to wipe the oxides from the cable without damaging conductor plating. The cover then locks the cable in place. (See Fig. 1)



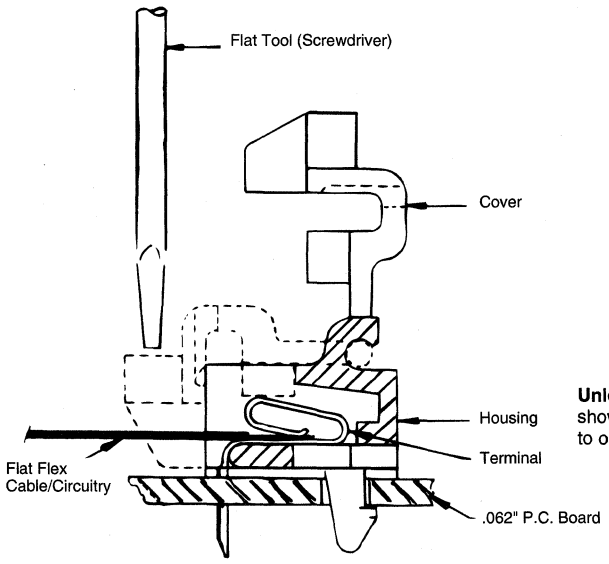


Fig. 2

Locking Force: To be applied in direction shown to allow cover to "FLEX" cut over the locking dimples of the housing.

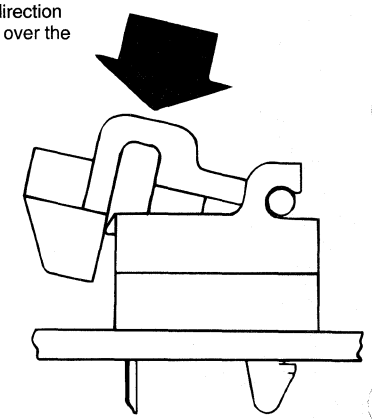
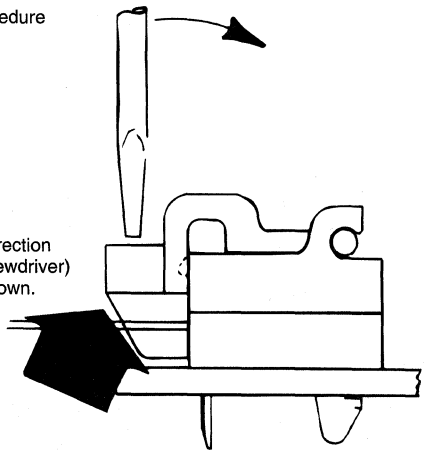


Fig. 1

Locking/Unlocking Procedure

Fig. 3

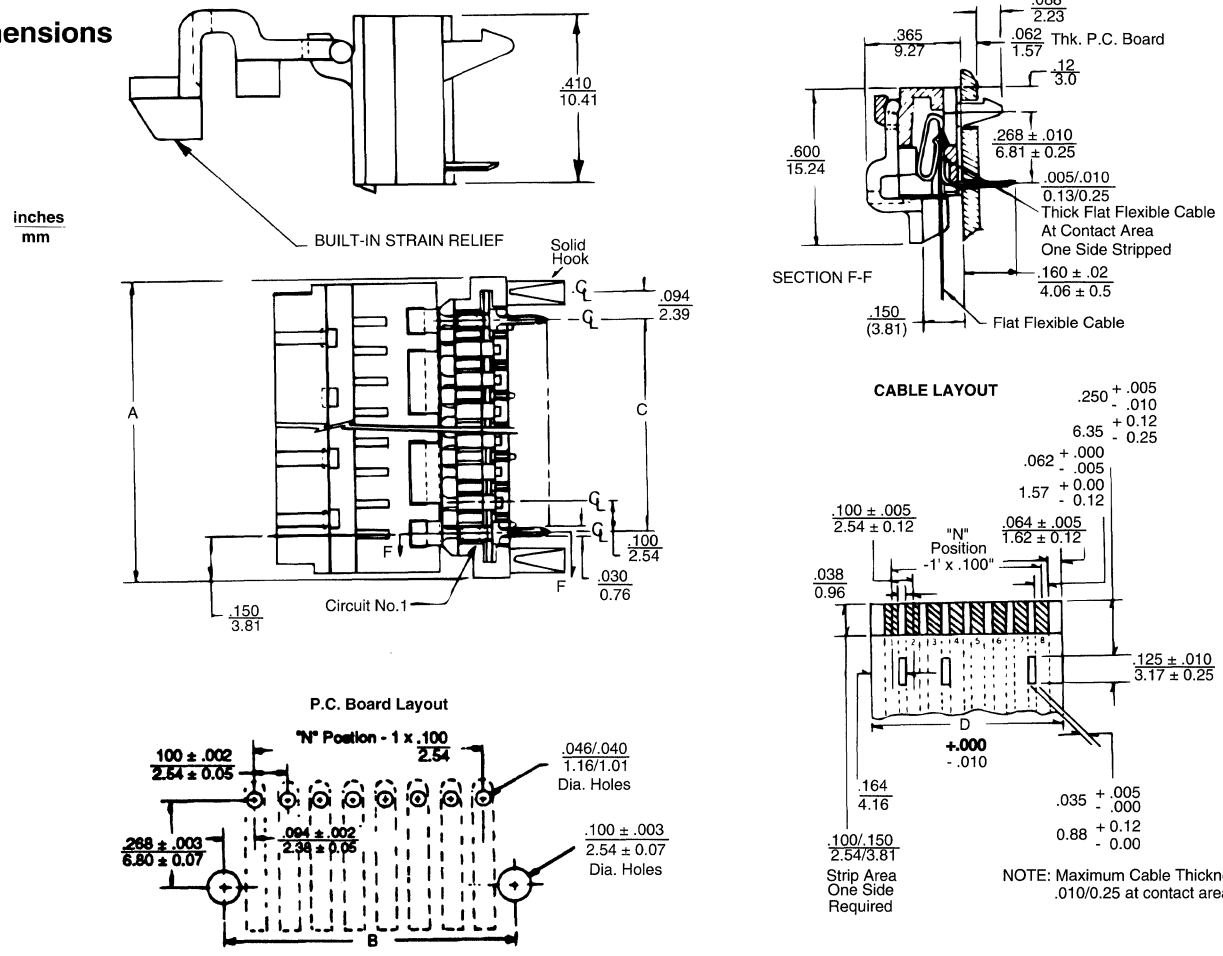
Unlocking Force: To be applied in direction shown with fingers or use flat tool (screwdriver) to open cover applying pressure as shown.



.100" 2.54 mm Center FFC/FPC Connector

4850 Series

Dimensions



NOTE: Cable must be notched.

Ordering Information and Dimensions

Circuits	Order No.	Dim. A		Dim. B		Dim. C		Dim. D		Cable Slots for Strain Relief Located Between
5	15-25-4051	.700	17.78	.588	14.94	.400	10.16	.590	14.98	1 & 2, 3 & 4
6	15-25-4061	.800	20.32	.688	17.48	.500	12.70	.690	17.52	1 & 2, 4 & 5
7	15-25-4071	.900	22.86	.788	20.02	.600	15.24	.790	20.06	1 & 2, 5 & 6
8	15-25-4081	1.000	25.40	.888	22.56	.700	17.78	.890	22.60	1 & 2, 3 & 4, 7 & 8
9	15-25-4091	1.100	27.94	.988	25.10	.800	20.32	.990	25.14	1 & 2, 3 & 4, 8 & 9
10	15-25-4101	1.200	30.48	1.088	27.64	.900	22.86	1.090	27.68	1 & 2, 3 & 4, 9 & 10
11	15-25-4111	1.300	33.02	1.188	30.18	1.000	25.40	1.190	30.22	1 & 2, 3 & 4, 10 & 11
12	15-25-4121	1.400	35.56	1.288	32.72	1.100	27.94	1.290	32.76	1 & 2, 3 & 4, 11 & 12
13	15-25-4131	1.500	38.10	1.388	35.26	1.200	30.48	1.390	35.30	1 & 2, 3 & 4, 12 & 13
14	15-25-4141	1.600	40.64	1.488	37.80	1.300	33.02	1.490	37.84	1 & 2, 3 & 4, 13 &14
15	15-25-4151	1.700	43.18	1.588	40.34	1.400	35.56	1.590	40.38	1 & 2, 3 & 4, 14 & 15
16	15-25-4161	1.800	45.72	1.688	42.88	1.500	38.10	1.690	42.92	1 & 2, 3 & 4, 15 & 16
17	15-25-4171	1.900	48.26	1.788	45.42	1.600	40.64	1.790	45.46	1 & 2, 3 & 4, 16 & 17
18	15-25-4181	2.000	50.80	1.888	47.96	1.700	43.18	1.890	48.00	1 & 2, 3 & 4, 17 & 18
19	15-25-4191	2.100	53.34	1.988	50.50	1.800	45.72	1.990	50.54	1 & 2, 3 & 4, 18 & 19
20	15-25-4201	2.200	55.88	2.088	53.04	1.900	48.26	2.090	53.08	1 & 2, 3 & 4, 19 & 20
21	15-25-4211	2.300	58.42	2.188	55.58	2.000	50.80	2.190	55.62	1 & 2, 3 & 4, 20 & 21
22	15-25-4221	2.400	60.96	2.288	58.12	2.100	53.34	2.290	58.16	1 & 2, 3 & 4, 21 & 22
23	15-25-4231	2.500	63.50	2.388	60.66	2.200	55.88	2.390	60.70	1 & 2, 3 & 4, 22 & 23
24	15-25-4241	2.600	66.04	2.488	63.20	2.300	58.42	2.490	63.24	1 & 2, 3 & 4, 23 & 24
25	15-25-4251	2.700	68.58	2.588	65.74	2.400	60.69	2.590	65.78	1 & 2, 3 & 4, 24 & 25

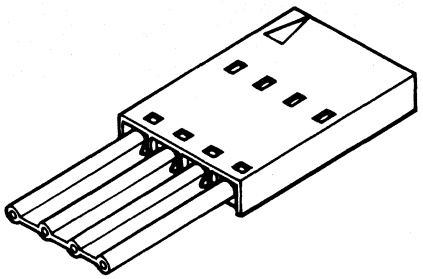
.100" 2.54 mm Center Ribbon Cable Connectors

70475 Series Male
70400 Series Female

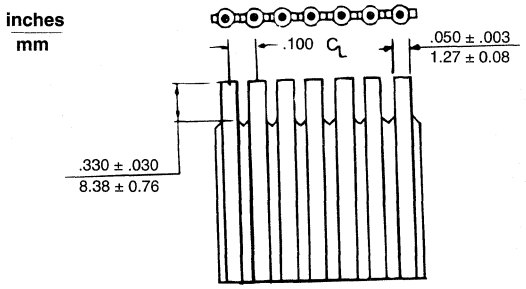
- Modular connectors for use with C-Grid single row shrouded headers and clips
- Terminals pre-loaded into housing
- Polarization and positive locking options
- Circuit sizes 2-25
- Recommended Molex Ribbon Cable Eng. Nos.

7307	8996
24241	8997
24226	24369
7767	24389

Order Cable Separately
See Section D, this catalog

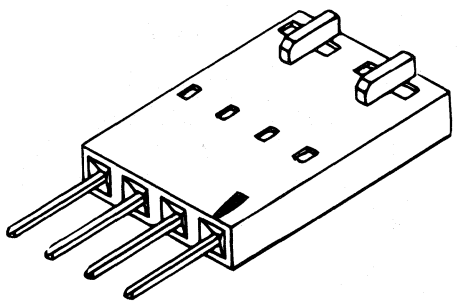


Notch Specification for Ribbon Cable



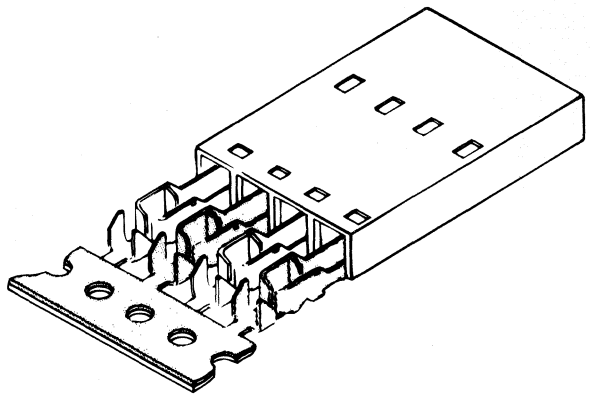
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70475 Series Male
"D" Version



See Section A, this catalog, for complete specifications and ordering information.

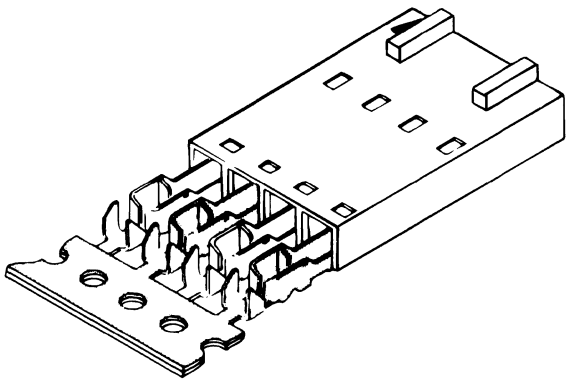
70400 Series Female
"A" Version



See Section A, this catalog, for complete specifications and ordering information.

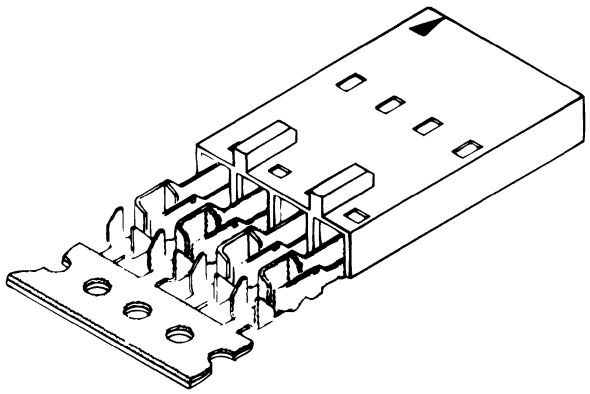
.100" 2.54 mm Center Ribbon Cable Connectors

70400 Series Female
"C" Version



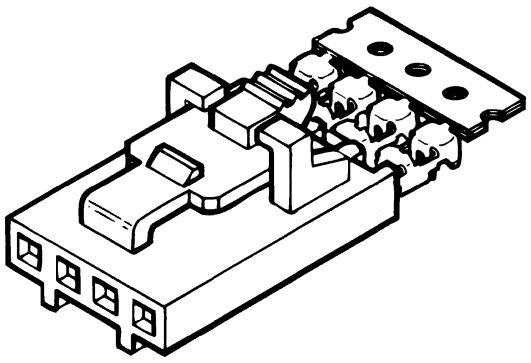
See Section A, this catalog, for complete specifications and ordering information.

70400 Series Female
"D" Version



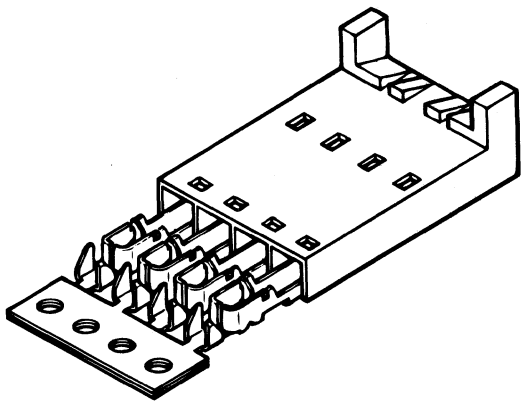
See Section A, this catalog, for complete specifications and ordering information.

70400 Series Female
"G" Version



See Section A, this catalog, for complete specifications and ordering information.

70400 Series Female
"H" Version



See Section A, this catalog, for complete specifications and ordering information.

G

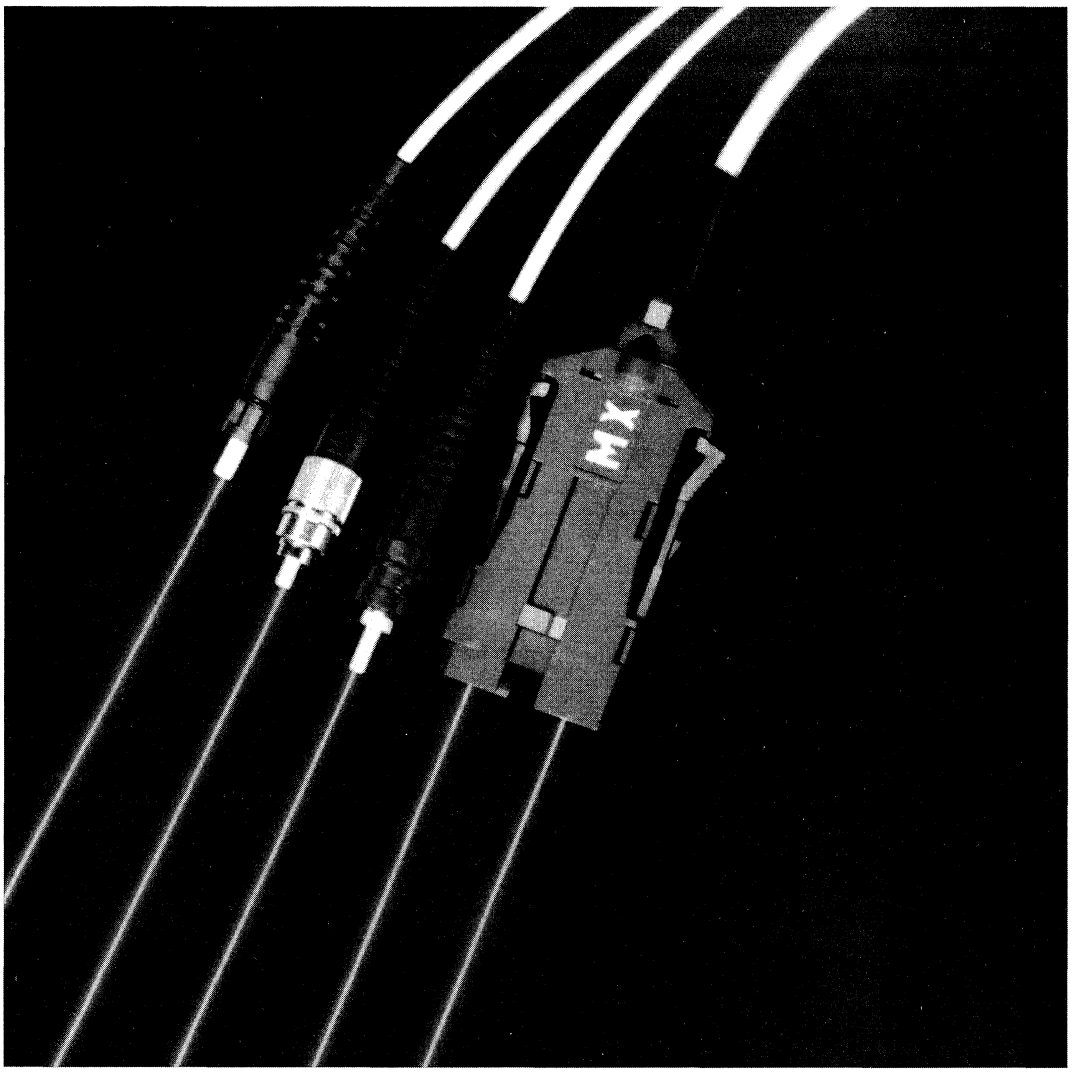
Notes

G

Fiber Optic Connectors

molex®
Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

Contents



ST* Compatible Connectors 2H-11H
ST II* Compatible Connectors 12H-15H
FDDI Connectors & Adapters 16H-19H
ESCON** Connectors & Adapters 20H-23H
SMA Connectors 24H-27H
FC II Compatible Connectors 28H-31H
FC/PC Connectors 32H-35H
SC Connectors 36H-39H
Cable Assemblies 40H-45H
Termination Tooling 46H-51H
Fiber Optic Switches 52H-57H
Premise Wiring 58H-67H

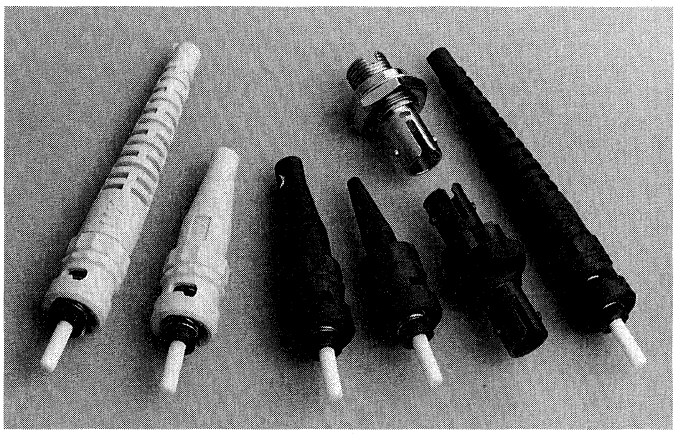
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**ESCON is a registered trademark of IBM Corporation.

ST* Compatible Connector

Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

86010 Series

- Low insertion loss, 0.2 dB typ. multimode 0.25dB typ. single mode
- Low return loss, -18 dB typ. multimode -32 dB typ. single mode (PC) -40 dB typ. single mode (super PC) - special process required
- Multimode & single mode versions
- ST compatible, bayonet coupling
- High performance pre-polished PC ferrule
- Field installable
- Crimpless screw type strength member retention with long boot
- Crimp style with short boot
- Bare fiber version



H

Description

The 86010 Series lightwave connector is specially designed for distribution applications and is fully compatible with all existing ST type hardware. Three connector styles are offered in both multimode and single mode versions. The long boot style offers superior strain relief with a screw-on Kevlar captivation mechanism. The short boot crimp style is designed for small bend radius applications where space is limited, and the bare fiber version is designed for 900 micron buffered bare fiber terminations.

This connector is designed using the latest engineered polymer and ceramic material technologies. Combining unique termination features with a pre-polished PC ferrule, the 86010 Series can easily be terminated in the field using Molex's 86710 Series tool kit.

Connector to connector mating is achieved by using a bulkhead feed-through adapter. This adapter combines a precision molded polymeric housing and a super precision ceramic or polymeric alignment sleeve.

Applications

- Local Area Networks
- Data processing networks
- Telecommunication networks
- Active device termination
- Premise installations
- Instrumentation

*ST is a registered trademark of AT&T

ST* Compatible Connector

molex® Fiber Optic Interconnect Technologies, Inc.™
708-803-3600

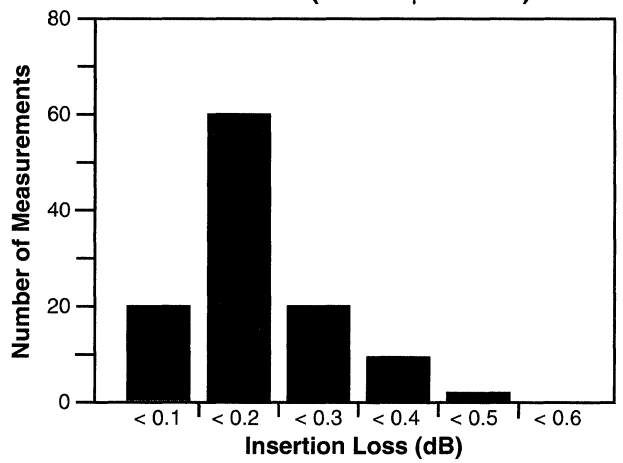
86010 Series

Optical Performance

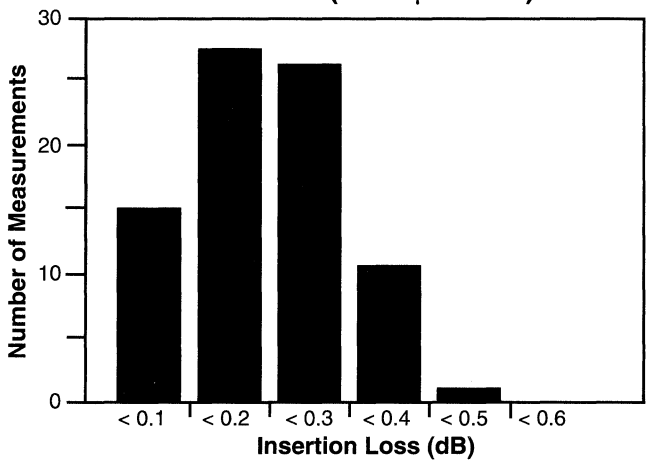
Characteristics	Units	Mean	Sigma	Typ.	Comments
Insertion Loss:					
9/125 μm SM fiber	dB	0.20	0.09	0.25	
50/125 μm MM fiber	dB	0.17	0.08	0.20	
62.5/125 μm MM fiber	dB	0.09	0.05	0.10	
100/140 μm MM fiber	dB	0.08	0.05	0.08	
Return Loss:					
Multimode	dB	–	–	-18	
Single mode	dB	–	–	<-32	PC polish
Single mode	dB	–	–	<-45	Super PC polish (special process required)

Optical Performance Distribution

ST* Connector (50/125 μm fiber)



ST* Connector (9/125 μm fiber)



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Environmental Performance and other Specifications

Characteristics	Units	Min.	Typ.	Max.	Comments
Durability	ΔdB	–	–	0.1	per FOTP-21A, 1000 cycles, cleaning every 100 cycles.
Temperature Range:					
Storage	°C	- 40	–	+80	May be further limited by cable specifications
Operating	°C	- 40	–	+80	May be further limited by cable specifications
Thermal Shock	ΔdB	–	–	0.1	- 40°C to +60°C, 10 cycles, per Bellcore TR-TSY-000326, section 4.3.8 & 5.3.8
Temperature Cycling	ΔdB	–	–	0.1	- 40°C to +80°C, 40 cycles
Humidity Cycling	ΔdB	–	–	0.1	+60°C at 95% RH for 504 hours (FOTP-5, type 1)
Cable Retention	ΔdB	–	–	0.2	40 lb. Load without Adhesive (FOTP-6)
Cable OD	mm	–	3.0		
	mm	–	2.4		
Termination Time	min			5.0	Avg. per connector, excluding epoxy curing

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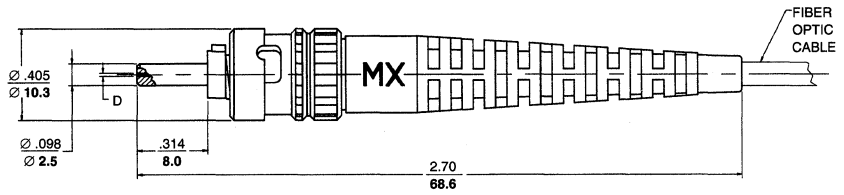
ST* Compatible Connector

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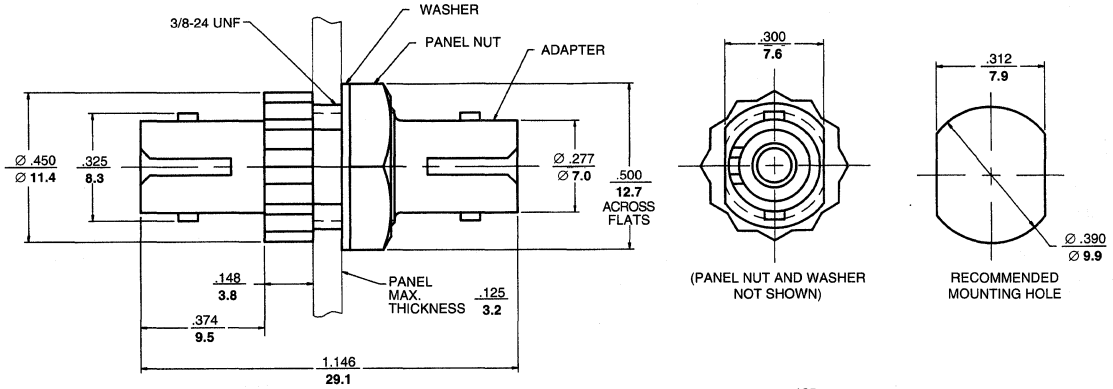
86010 Series

Mechanical Dimensions

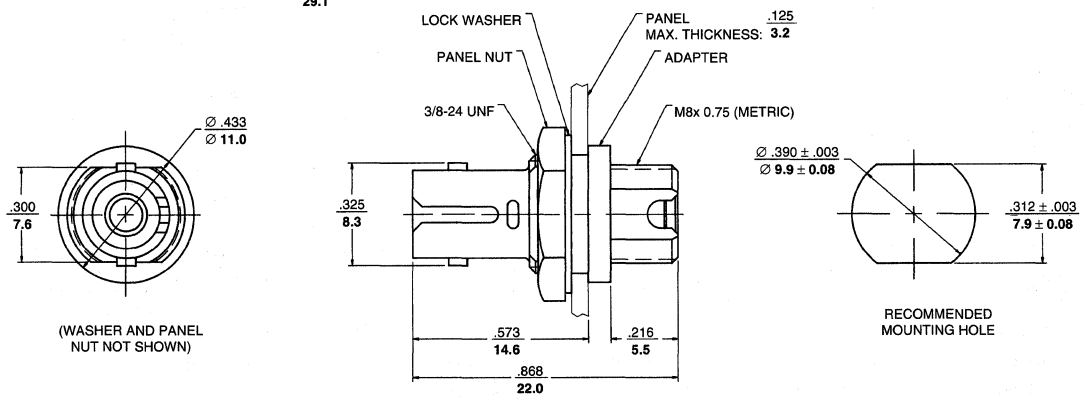
Connector



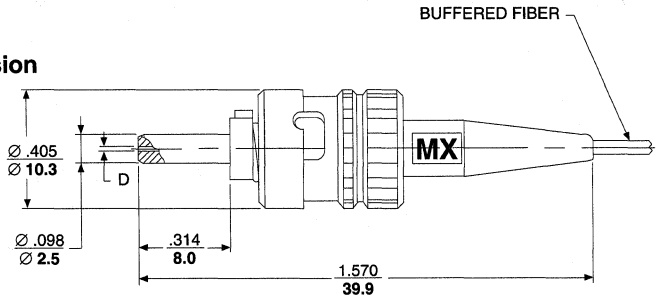
Adapter
ST to ST



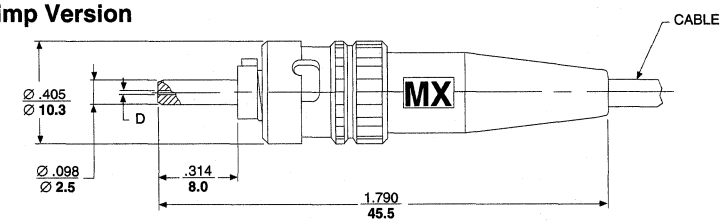
Adapter
ST to FC



Bare Fiber Version



Short Boot Crimp Version



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ST* Compatible Connector

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86010 Series

Ordering Information

Order Number	Description	Cable size
86010-1000	ST connector, multimode, 140μm fiber, alumina PC ferrule, long boot	2.4mm & 3.0mm
86010-1200	ST connector, multimode, 140μm fiber, alumina PC ferrule, short boot, crimp	2.4mm & 3.0mm
86010-1500	ST connector, multimode, 140μm fiber, alumina PC ferrule, boot for 900μm	900μm buffered fiber
86010-3000	ST connector, multimode, 125μm fiber, zirconia PC ferrule, long boot	2.4mm & 3.0mm
86010-3200	ST connector, multimode, 125μm fiber, zirconia PC ferrule, short boot, crimp	2.4mm & 3.0mm
86010-3500	ST connector, multimode, 125μm fiber, zirconia PC ferrule, boot for 900μm	900μm buffered fiber
86010-5000	ST connector, single mode, 125μm fiber, zirconia PC ferrule, long boot	2.4mm & 3.0mm
86010-5200	ST connector, single mode, 125μm fiber, zirconia PC ferrule, short boot, crimp	2.4mm & 3.0mm
86010-5500	ST connector, single mode, 125μm fiber, zirconia PC ferrule, boot for 900μm	900μm buffered fiber
86010-9000	ST connector, multimode, 230μm fiber, alumina PC ferrule, long boot	2.4mm & 3.0mm
86010-9200	ST connector, multimode, 230μm fiber, alumina PC ferrule, short boot, crimp	2.4mm & 3.0mm
86010-9500	ST connector, multimode, 230μm fiber, alumina PC ferrule, boot for 900μm	900μm buffered fiber
86110-0000	ST adapter, zirconia alignment sleeve	
86113-0000	ST adapter, polymeric alignment sleeve	
86172-0000	ST to FC adapter, zirconia alignment sleeve	
86710-0000	ST termination tool kit, with 110V/60Hz curing oven	
86711-0000	ST termination tool kit, with 220V/50Hz curing oven	
86710-5000	Consumable replacement kit	

All of the above connectors are available in gray. Substitute a "G" in the part number for the "-".

Specifications subject to change

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Custom Cable Assemblies

Molex will provide custom cable assemblies to your specification, including PC and super PC performances. Cable assemblies are 100% tested for optical performance. Molex uses statistical process controls and zero defect objectives in its manufacturing processes.

Contact your nearest Molex sales office for more information.

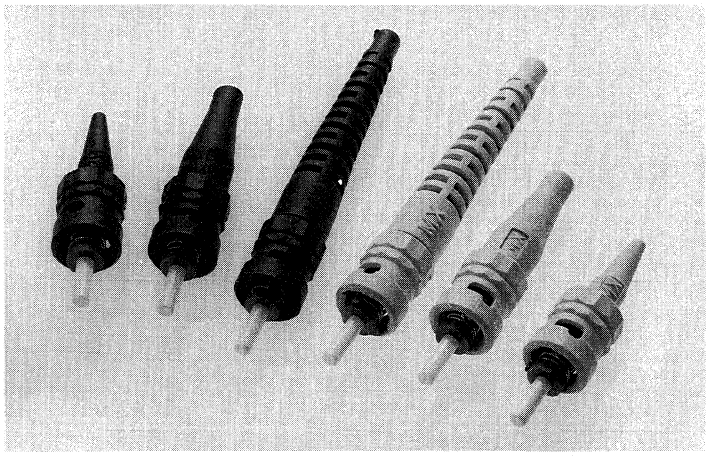
* ST is a registered trademark of AT&T

MX Plus, ST* Compatible

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86010-6000 Series

Performance
Low cost
User Friendly
ST



- Low insertion loss, 0.4 dB typ. and 0.7 dB max. (62.5/125μm)
- ST compatible, bayonet coupling
- High performance ceramic ferrule
- Field installable
- Crimpless screw type strength member retention with long boot
- Crimp style with short boot
- Bare fiber version

H

Description

The 86010-6000 Series lightwave connector is specially designed for low cost datacommunication applications. This connector incorporates a precision ceramic ferrule with a flat end face configuration. It is fully compatible with all existing ST type connector hardware and is available in three styles. The long boot design offers superior strain relief with a screw-on Kevlar captivation mechanism. The short boot crimp version is designed for small bend radius applications where space is limited, and the bare fiber version is designed for 900 micron buffered bare fiber terminations.

This connector is designed using the latest engineered polymer and ceramic material technologies. Combining unique termination features with a ceramic ferrule, the 86010-6000 Series can easily be terminated in the field using Molex's 86710 Series tool kit.

Connector to connector mating is achieved by using a bulkhead feed-through adapter. This adapter combines a precision molded polymeric housing and a super-precision ceramic or polymeric alignment sleeve.

Applications

- Local Area Networks
- Data processing networks
- Active device termination
- Premise installations
- Instrumentation

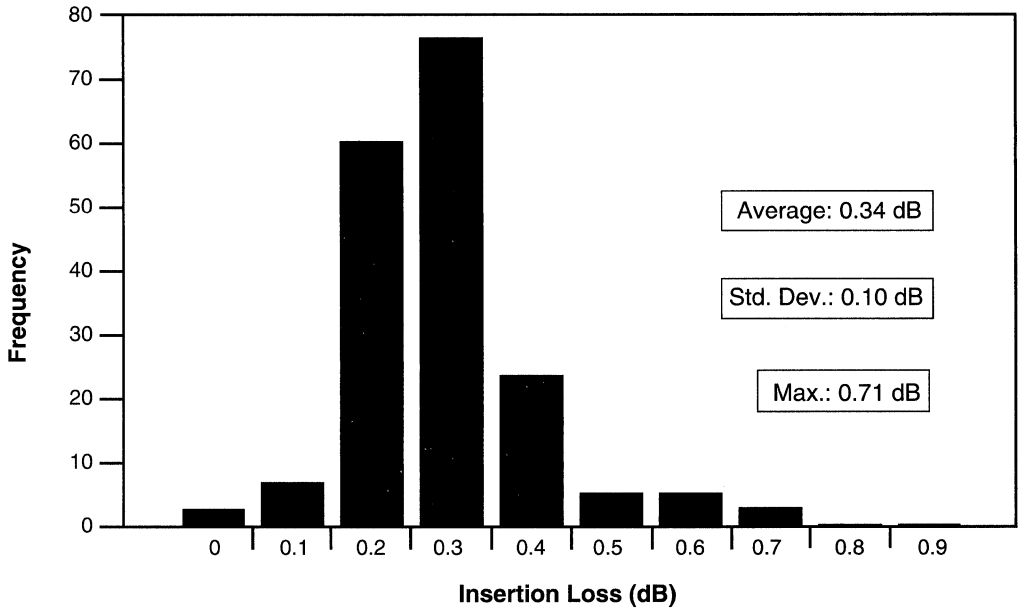
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MX Plus, ST* Compatible

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86010-6000 Series

Performance (62.5/125μm fiber)



NOTE: Refer to ST* Compatible Data Sheet, pages 3H and 4H, for Mechanical Dimensions and Environmental Performance

Ordering Information

Order Number	Description	Cable size
86010-6000	ST connector, multimode, 125μm fiber, ceramic ferrule, black, long boot	2.4mm & 3.0mm
86010-6200	ST connector, multimode, 125μm fiber, ceramic ferrule, black, short boot, crimp	2.4mm & 3.0mm
86010-6500	ST connector, multimode, 125μm fiber, ceramic ferrule, black, boot for 900μm	900 μm buffered fiber
86010G6000	ST connector, multimode, 125μm fiber, ceramic ferrule, gray, long boot	2.4mm & 3.0mm
86010G6200	ST connector, multimode, 125μm fiber, ceramic ferrule, gray, short boot, crimp	2.4mm & 3.0mm
86010G6500	ST connector, multimode, 125μm fiber, ceramic ferrule, gray, boot for 900μm	900 μm buffered fiber

Specifications subject to change

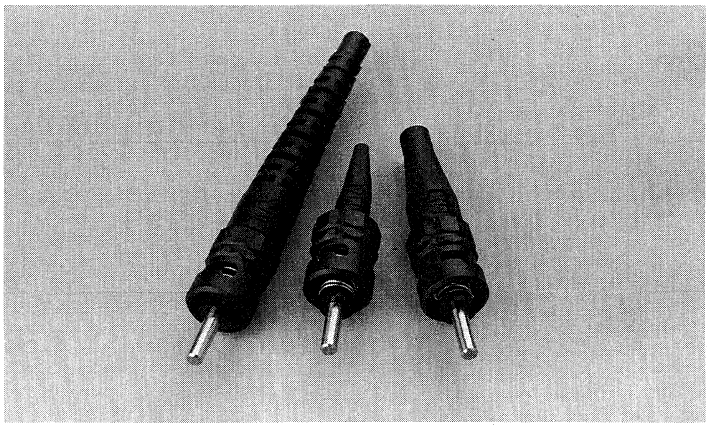
*ST is a registered trademark of AT&T

ST* Compatible Stainless Steel Ferrule

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86010-8000 Series

- Low insertion loss, 0.5 dB typ. and 0.8 dB max. (62.5/125µm)
- ST compatible, bayonet coupling
- High precision stainless steel ferrule
- Field installable
- Crimpless screw type strength member retention with long boot
- Crimp style with short boot
- Bare fiber version



H

Description

The 86010-8000 Series connector is specially designed for low cost datacommunication applications. This connector incorporates a precision stainless steel ferrule and is fully compatible with all existing ST type connector hardware and is available in three styles. The long boot design offers superior strain relief with a screw-on Kevlar captivation mechanism. The short boot crimp version is designed for small bend radius applications where space is limited, and the bare fiber version is designed for 900 micron buffered bare fiber terminations.

This connector is designed using the latest engineered polymer and stainless steel material technologies. Combining unique termination features with a stainless steel ferrule, the 86010-8000 Series can easily be terminated in the field using Molex's 86710 Series tool kit.

Connector-to-connector mating is achieved by using a bulkhead feed-through adapter. This adapter combines a precision molded polymer housing and a super-precision ceramic or polymeric alignment sleeve.

Applications

- Local Area Networks
- Data processing networks
- Active device termination
- Premise installations
- Instrumentation

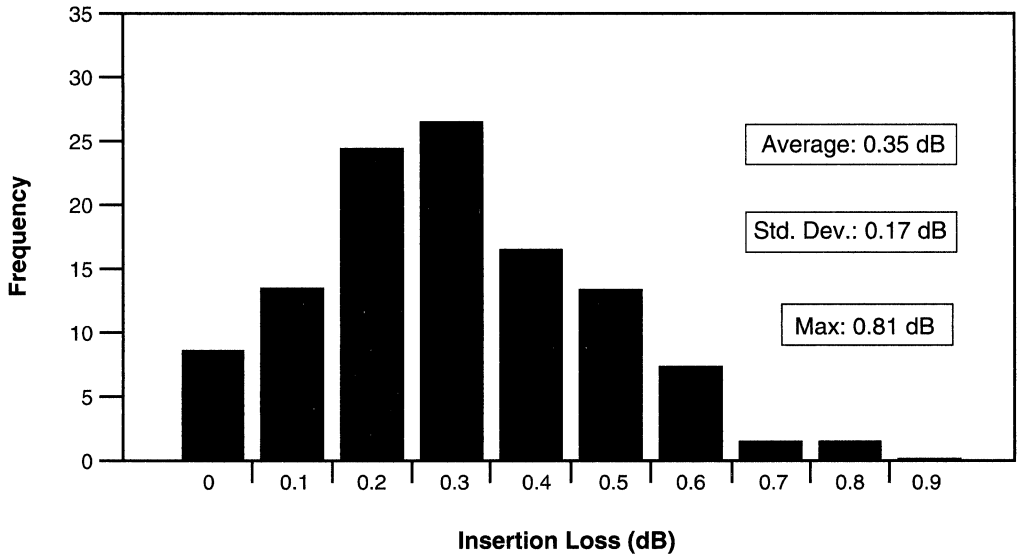
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ST* Compatible Stainless Steel Ferrule

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86010-8000 Series

Performance (62.5/125μm fiber)



H

NOTE: Refer to ST* Compatible Data Sheet, pages 3H and 4H, for Mechanical Dimensions and Environmental Performance

Ordering Information

Order Number	Description	Cable size
86010-8000	ST connector, multimode, 125μm, stainless steel ferrule, black, long boot	2.4mm & 3.0mm
86010-8200	ST connector, multimode, 125μm, stainless steel ferrule, black, short boot, crimp	2.4mm & 3.0mm
86010-8500	ST connector, multimode, 125μm, stainless steel ferrule, black, boot for 900μm	900 μm buffered fiber
86010G8000	ST connector, multimode, 125μm, stainless steel ferrule, gray, long boot	2.4mm & 3.0mm
86010G8200	ST connector, multimode, 125μm, stainless steel ferrule, gray, short boot, crimp	2.4mm & 3.0mm
86010G8500	ST connector, multimode, 125μm, stainless steel ferrule, gray, boot for 900μm	900 μm buffered fiber

Specifications subject to change

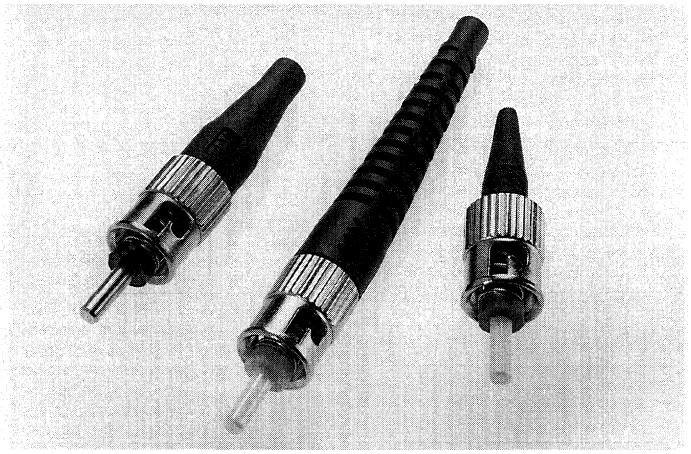
*ST is a registered trademark of AT&T

ST* Compatible Connector with Metal Coupling Nut

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86012 Series

- Metal coupling nut
- ST compatible bayonet coupling
- High performance ceramic and stainless steel ferrule
- Field installable



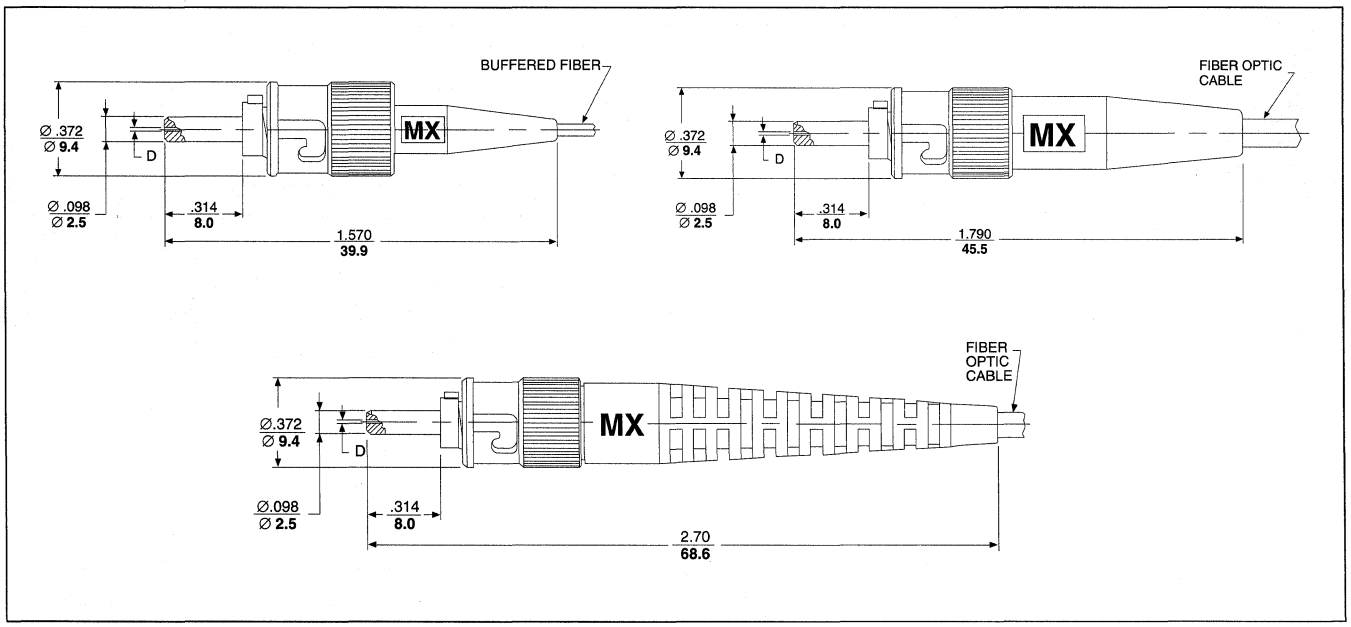
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Description

The 86012 Series ST Compatible connectors incorporate a rugged, high quality metal coupling nut, and are fully compatible with all existing ST connector hardware.

These connectors are designed using the latest engineered polymer, metal and ceramic technologies. The 86012 Series ST connectors are completely analogous to the Molex 86010 Series ST Connectors exhibiting identical performance characteristics. Refer to the 86010 ST Connector data sheet for complete performance data.

Mechanical Dimensions



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ST* Compatible Connector with Metal Coupling Nut

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86012 Series

Ordering Information

Part Number	Description	Cable size
86012-1000	ST Connector, 144µm multimode alumina PC ferrule, long boot	2.4mm & 3.0mm
86012-1200	ST Connector, 144µm multimode alumina PC ferrule, Short boot crimp	2.4mm & 3.0mm
86012-1500	ST Connector, 144µm multimode alumina PC ferrule, bare fiber	900 µm buffer
86012-3000	ST Connector, 128µm multimode zirconia PC ferrule, long boot	2.4mm & 3.0mm
86012-3200	ST Connector, 128µm multimode zirconia PC ferrule, short boot crimp	2.4mm & 3,0mm
86012-3500	ST Connector, 128µm multimode zirconia PC ferrule, bare fiber	900 µm buffer
86012-5000	ST Connector, 126µm single mode zirconia PC ferrule, long boot	2.4mm & 3.0mm
86012-5200	ST Connector, 126µm single mode zirconia PC ferrule, short boot crimp	2.4mm & 3.0mm
86012-5500	ST Connector, 126µm single mode zirconia PC ferrule, bare fiber	900 µm buffer
86012-7000	ST Connector, 127µm single mode zirconia PC ferrule, long boot	2.4mm & 3.0mm
86012-7200	ST Connector, 127µm single mode zirconia PC ferrule, short boot crimp	2.4mm & 3.0mm
86012-7500	ST Connector, 127µm single mode zirconia PC ferrule, bare fiber	900 µm buffer
86012-6000	ST Connector, MX + 128µm multimode alumina ferrule, long boot	2.4mm & 3.0mm
86012-6200	ST Connector, MX + 128µm multimode alumina ferrule, short boot crimp	2.4mm & 3.0mm
86012-6500	ST Connector, MX + 128µm multimode alumina ferrule, bare fiber	900 µm buffer
86012-8000	ST Connector, 128µm multimode, stainless steel ferrule, long boot	2.4mm & 3.0mm
86012-8200	ST Connector, 128µm multimode, stainless steel ferrule, short boot crimp	2.4mm & 3.0mm
86012-8500	ST Connector, 128µm multimode, stainless steel ferrule, bare fiber	900 µm buffer
86012-9000	ST Connector, 230µm multimode, alumina ferrule, long boot	2.4mm & 3.0mm
86012-9200	ST Connector, 230µm multimode, alumina ferrule, short boot crimp	2.4mm & 3.0mm
86012-9500	ST Connector, 230µm multimode, alumina ferrule, bare fiber	900 µm buffer

NOTE: See Molex ST* compatible data sheet Series 86010 for environmental performance data.

Specifications subject to change

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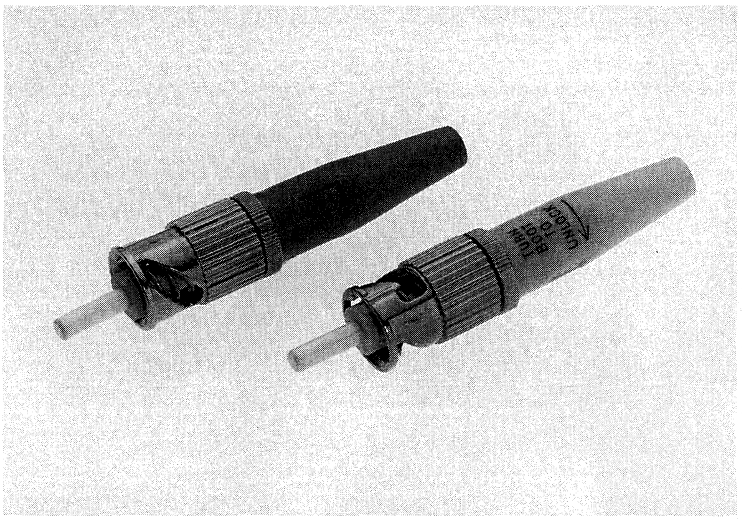
* ST is a registered trademark of AT&T

MX II, ST II* Compatible Connector

Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

86013 Series
With Non-Optical Disconnect (NOD) Option

- High Performance
  - Low insertion loss
    - 0.2 dB typ. multimode
    - 0.25 dB single mode
  - Low return loss
    - -18 dB typ. multimode
    - -32 dB typ. single mode
    - -45 dB typ. Super PC, single mode
- ST Compatible bayonet coupling with locking nut feature
- Non-Optical Disconnect design
- High performance pre-polished PC ferrules
- Field installable
- Multimode and single mode versions



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Description

The new 86013 Series fiber optic connector is fully compatible with all existing ST and ST II type connector hardware. It is available in either a standard configuration or in a Non-Optical Disconnect (NOD) with a locking coupling nut configuration. Multimode and single mode versions are available for both configurations.

The NOD version operates by loosening and tightening the strain relief boot assembly. To mount the connector, the boot assembly must be loosened by rotating counterclockwise. Once the connector is mounted, the boot assembly is tightened with a clockwise rotation. Once the boot assembly is fully tightened, the connector cannot be removed and the internal axial travel of the contact is limited to prevent optical disconnect.

The MX II is designed using the latest engineered polymer, ceramic and metal technologies. Combining unique termination features with pre-polished PC ferrules, the 86013 Series connector can be easily terminated in the field using Molex's 86713 Series tooling.

Connector-to-connector mating is achieved by using a bulkhead feed-through adapter. The adapter combines a precision molded polymeric housing and a super-precision ceramic or polymeric alignment sleeve.

Applications

- Local Area Networks
- Data processing networks
- Telecommunication networks
- Active device termination
- Premise installation
- Instrumentation

*ST II is a registered trademark of AT&T

MX II, ST II* Compatible Connector

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86013 Series
With Non-Optical Disconnect (NOD) Option

Optical Performance

Characteristics	Units	Mean	Sigma	Typ.	Comments
Insertion Loss:					
9/125 µm SM fiber	dB	0.15	0.06	0.15	Measured at 1300nm
9/125 µm SM fiber	dB	0.16	0.06	0.15	Measured at 1550nm
50/125 µm MM fiber	dB	0.06	0.04	0.15	Measured at 1300nm
Return Loss:					
Single mode	dB	-31.0		<-30	PC Polish
Single mode	dB	-54.1	2.5	<-45	Super PC polish measured at 1300nm
Single mode	dB	-55.2	2.6	<-45	Super PC polish measured at 1550nm

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Environmental Performance and Other Specifications

Characteristics	Units	Min.	Typ.	Max.	Comments
Durability	ΔdB	–	–	0.05	FOTP - 21 1000 cycles, cleaning every 100 cycles
Temperature Range					
Storage	°C	-40	–	80	May be further limited by cable specifications
Operating	°C	-40	–	80	May be further limited by cable specifications
Thermal Aging	ΔdB	–	–	0.06	FOTP - 4, 85°C 14 days
Temperature Cycling	ΔdB	–	–	0.08	Bellcore TR-TSY-000326, -40°C to 70°C 42 cycles
Humidity Cycling	ΔdB	–	–	0.07	FOTP - 5, 95% RH, 60°C 14 days
Flex Test	ΔdB	–	–	0.06	Bellcore TR-TSY 000326 0.9 Kg, 100 cycles
Twist Test	ΔdB	–	–	0.07	Bellcore TR-TSY-000326, 3 lb load
Proof Test	ΔdB	–	–	0.06	Bellcore TR-TSY-000326 10 lb at 90°, 15 lb at 0°
Straight Pull Test	ΔdB	–	–	0.05	Bellcore TR-TSY-000326, 4 lb load
Termination Time	min.	–	–	6.5	Average per connector, excluding epoxy cure time
Cable OD	mm	–	3.0	–	Note: all measurements are performed at 1550nm
	mm	–	2.4	–	

Contact Molex Fiber Optics for a complete test report

*ST II is a registered trademark of AT&T

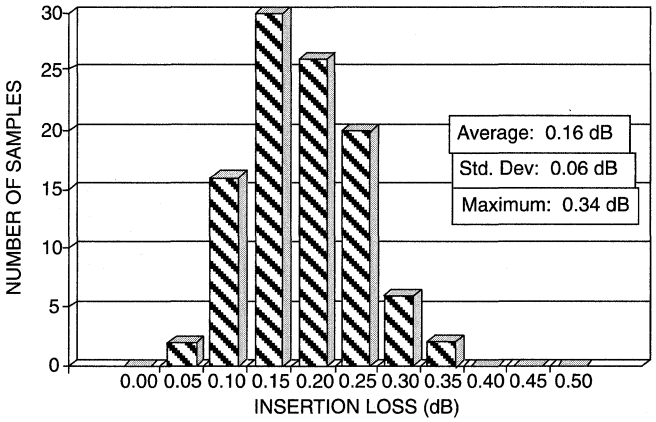
MX II, ST II* Compatible Connector

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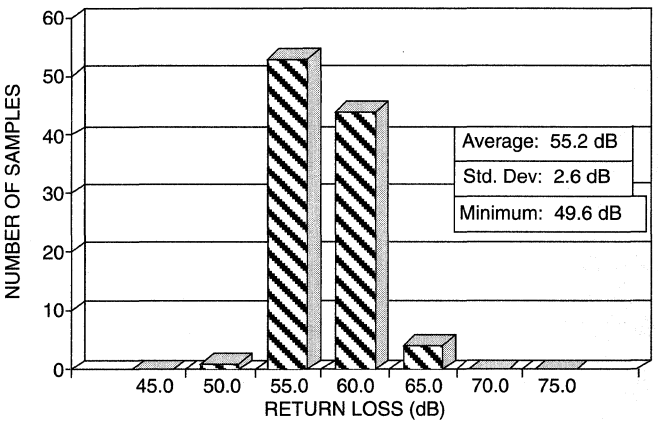
86013 Series
With Non-Optical Disconnect (NOD) Option

Optical Performance Distribution

ST II Single Mode Connector
Insertion Loss Test (At 1550 nm)

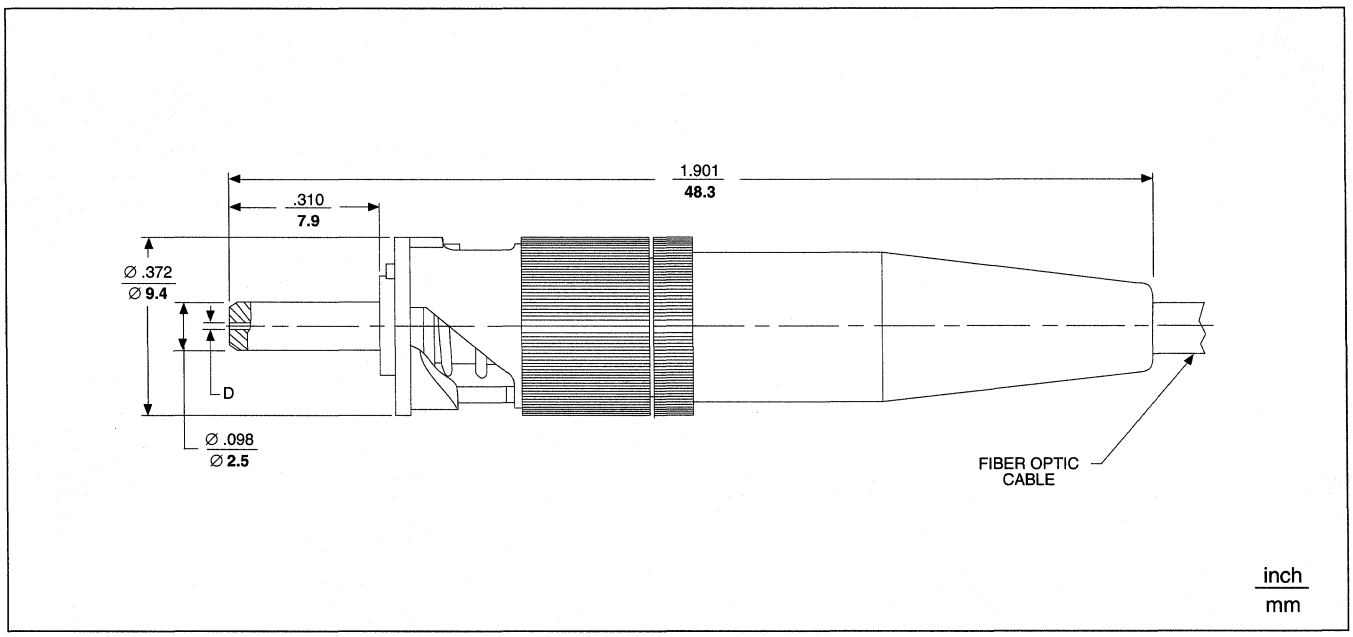


ST II Single Mode Connector
Return Loss Test (At 1550 nm)



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Mechanical Dimensions



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MX II, ST II* Compatible Connector

Fiber Optic Interconnect Technologies, Inc.™
708-803-3600

86013 Series

Ordering Information

Order Number	Description	"D"	Cable Size
86013-3000	ST II Connector, multimode, 125 µm fiber, zirconia PC ferrule, NOD option	128µm	3.0mm
86013-5000	ST II Connector, single mode, 125 µm fiber, zirconia PC ferrule, NOD option	126µm	3.0mm
86013-7000	ST II Connector, single mode, 125 µm fiber, zirconia PC ferrule, NOD option	127µm	3.0mm
86013-6000	ST II Connector, multimode, 125 µm fiber, MX + alumina ferrule, NOD option	128µm	3.0mm
86013-8000	ST II Connector, multimode, 125 µm fiber, stainless steel ferrule, NOD option	127µm	3.0mm
86013-3100	ST II Connector, multimode, 125 µm fiber, zirconia PC ferrule	128µm	3.0mm
86013-5100	ST II Connector, single mode, 125 µm fiber, zirconia PC ferrule	126µm	3.0mm
86013-7100	ST II Connector, single mode, 125 µm fiber, zirconia PC ferrule	127µm	3.0mm
86013-6100	ST II Connector, multimode, 125 µm fiber, MX + alumina ferrule	128µm	3.0mm
86013-8100	ST II Connector, multimode, 125 µm fiber, stainless steel ferrule	127µm	3.0mm
86713-0010	ST II Add-on tool kit (cable jacket splitter, cable insertion tool, crimp tool and stripping template) to be used with standard ST tool kit		
86713-0000	ST II Termination tool kit with 110V/60Hz curing oven		
86714-0000	ST II Termination tool kit with 220V/50Hz curing oven		
86713-3020	ST II Cable jacket splitter		
86713-3010	ST II Cable insertion tool		
86713-5200	ST II Crimp tool		
86713-5201/2	ST II Crimp dies (both 5201 and 5202 required)		
86710-0006	Cable prep template		

Specifications subject to change

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Custom Cable Assemblies

Molex will provide custom cable assemblies to your specification. Cable assemblies are 100% tested for optical performance. Molex uses statistical process controls and zero defect objectives in its manufacturing processes.

Contact your nearest Molex sales office for more information.

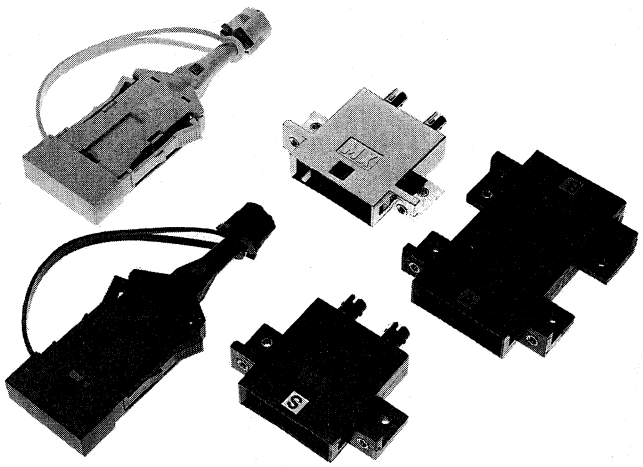
*ST II is a registered trademark of AT&T

FDDI Connector & Adapters

molex®
Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

86030 Series

- Fully compatible with FDDI standard
- Low insertion loss, 0.15 dB typ.
- Free floating structure
- Ceramic ferrules
- Positive latching mechanism
- Keying & color coding identification



H

Description

The 86030 Series lightwave duplex connector system is specially designed for datacommunication applications. Molex 86030 Series is fully compatible with ANSI's FDDI standard.

The connector is designed using the latest engineered polymer and ceramic material technologies. This series combines unique termination features and tooling.

The 86030 Series can be terminated in the field using Molex's 86730 Series tool kit.

All connectors and cable assemblies are shipped with color-coded, polarized keys and a dust cap. Key styles A & B are used with dual attachment stations. Key styles M & S are used for the attachment of a single station to a concentrator, with M at the concentrator end, and S at the station end. Three keys (A, B & M) and four identification boot keys are provided, to be installed by the user. The S keyed connector does not contain a key.

Two types of adapters are available: Duplex to Duplex, or Duplex to ST* intermatings. These adapters combine a precision molded polymeric housing and super-precision ceramic or polymeric alignment sleeves. All adapters have key identifications.

Applications

- Duplex fiber optic system
- Building wiring
- FDDI backbone network
- FDDI front end network
- FDDI back end network
- IEEE 802.4 token bus

FDDI Connector & Adapters

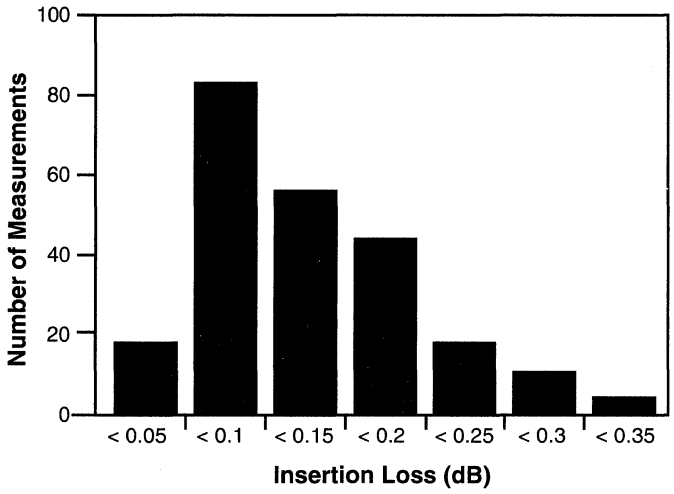
molex® Fiber Optic Interconnect Technologies, Inc.™
708-803-3600

86030 Series

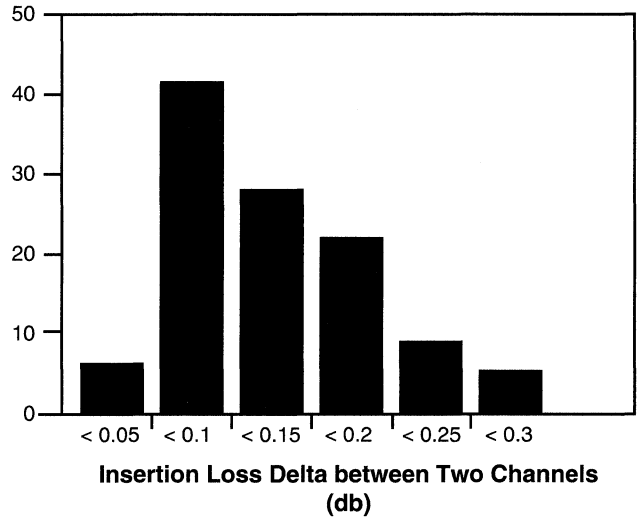
Optical Performance

Characteristics	Units	Mean	Sigma	Typ.	Comments
Insertion Loss					
50/125 μm MM fiber	dB	0.20	0.08	0.20	
62.5/125 μm MM fiber	dB	0.13	0.05	0.15	
Variation between channel	ΔdB	0.08	0.06	0.1	

FDDI Fiber Optic Contact (62.5/125 μm fiber)



FDDI Connector (62.5/125 μm fiber)



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Environmental Performance and Other Specifications

Characteristics	Units	Mean	Sigma	Typ.	Comments
Durability	ΔdB	–	–	0.1	per FOTP-21A, 1000 cycles, cleaning every 100 cycles.
Temperature Range					
Storage	°C	- 40	–	+80	may be further limited by cable specifications
Operating	°C	- 40	–	+80	may be further limited by cable specifications
Thermal Shock	ΔdB	–	–	0.1	- 40°C to +60°C, 10 cycles, per Bellcore TR-TSY-000326, section 4.3.8 & 5.3.8
Temperature Cycling	ΔdB	–	–	0.1	- 40°C to +80°C, 40 cycles
Humidity Cycling	ΔdB	–	–	0.1	+60°C at 95% RH for 504 hours (FOTP-5, type 1)
Cable Retention	ΔdB	–	–	0.2	50 lb. load without adhesive (FOTP-6)
Cable OD	mm	–	4.0		
	mm	–	4.8		
Assembly Time	min			7.0	avg. per contact, excluding epoxy curing

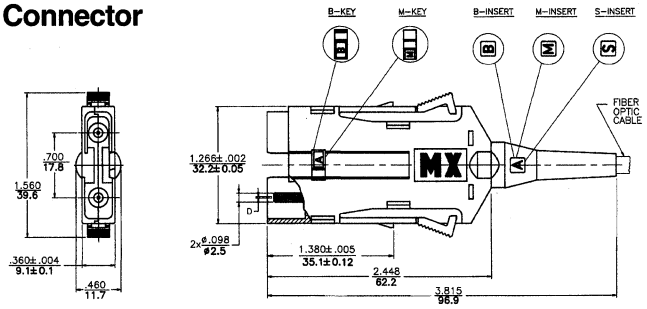
FDDI Connector & Adapters

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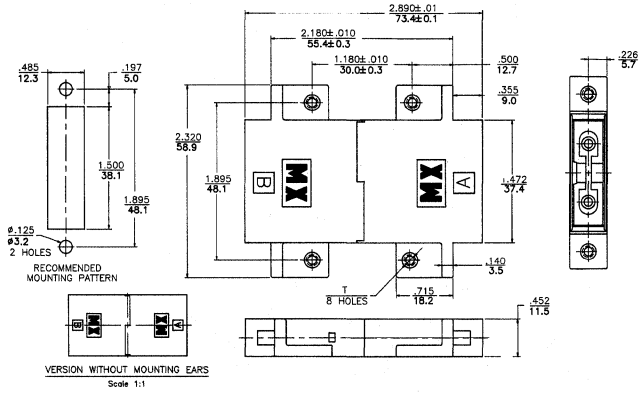
86030 Series

Mechanical Dimensions

Connector

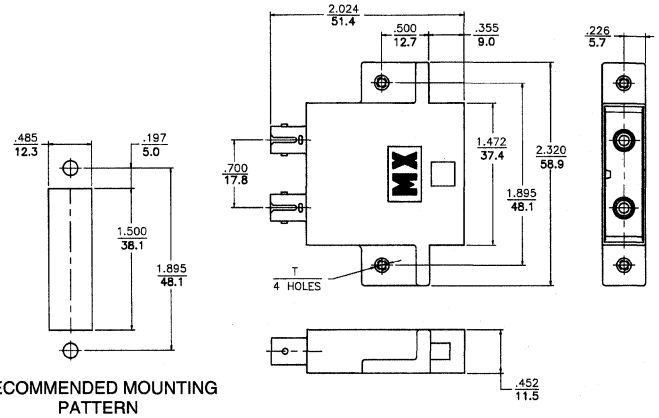


Duplex to Duplex Adapter

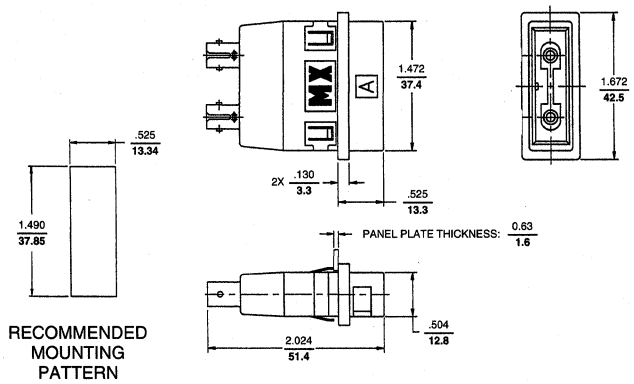


Refer to FDDI Standard for key location

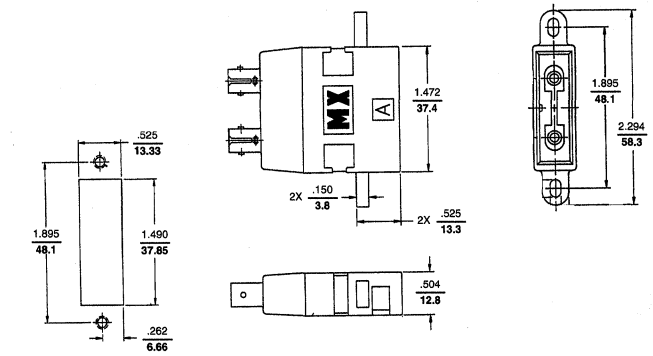
Duplex to ST* Adapter



Adapter with clips



Adapter without clips



*ST is a registered trademark of AT&T.

INCHES
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FDDI Connector & Adapters

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708-803-3600

86030 Series

Ordering Information

Order Number	Description
86030-3000 86030-3100 86030-3200 86030-3300	FDDI connector, multimode, zirconia ferrule, 4.2mm cable FDDI connector, multimode, zirconia ferrule, 4.8mm cable FDDI connector, multimode, zirconia ferrule, zipcord cable FDDI connector, multimode, zirconia ferrule, 4.2mm plenum cable
86030-6000 86030-6100 86030-6200 86030-6300	FDDI connector, flat ceramic ferrule, 4.2mm cable FDDI connector, flat ceramic ferrule, 4.8mm cable FDDI connector, flat ceramic ferrule, zipcord cable FDDI connector, flat ceramic ferrule, 4.2mm plenum cable
86030-5100 86030-5200	FDDI connector, single mode, zirconia ferrule, 4.8mm cable FDDI connector, single mode, zirconia ferrule, zipcord cable
86030-3010 86030-5010 86030-6010	FDDI contact, 125µm fiber, multimode, zirconia ferrule FDDI contact, 125µm fiber, single mode, zirconia ferrule FDDI contact, 125µm fiber, multimode, MX + alumina ferrule
86130-1000 86130-2000	FDDI duplex adapter, A/B key w/o mounting ears, zirconia sleeve FDDI duplex adapter, S/M key w/o mounting ears, zirconia sleeve
86130-X100	FDDI-ST* duplex adapter, 4-40, zirconia sleeve X = 3 for A key, 4 for B key, 5 for S key, 6 for M key
86130-X200	FDDI-ST duplex adapter, M3, zirconia sleeve X = 3 for A key, 4 for B key, 5 for S key, 6 for M key
86134-X200	FDDI-ST metalized adapter, M3, zirconia sleeve X = 3 for A key, 4 for B key, 5 for S key, 6 for M key
86134-X100	FDDI-ST metalized adapter, 4-40 zirconia sleeve X = 3 for A key, 4 for B key, 5 for S key, 6 for M key
86130A0000 86130A0300	FDDI-ST adapter, snap-in mount, removable keys, zirconia sleeve FDDI-ST adapter, flange mount, removable keys, zirconia sleeve
86133-1000 86133-2000 86133-1200 86133-2200 86133-1100 86133-2100	FDDI duplex adapter, A/B key w/o mounting ears, polymer sleeve FDDI duplex adapter, S/M key w/o mounting ears, polymer sleeve FDDI duplex adapter, A/B key w/mounting ears, M3, polymer sleeve FDDI duplex adapter, S/M key w/mounting ears, M3, polymer sleeve FDDI duplex adapter, A/B key w/ ears, 4-40, polymer sleeve FDDI duplex adapter, S/M key w/ ears, 4-40, polymer sleeve
86133-X100	FDDI-ST duplex adapter, 4-40, polymer sleeve X = 3 for A key, 4 for B key, 5 for S key, 6 for M key
86133-X200	FDDI-ST duplex adapter, M3, polymer sleeve X = 3 for A key, 4 for B key, 5 for S key, 6 for M key
86135-X200	FDDI-ST metalized adapter, M3, polymer sleeve X = 3 for A key, 4 for B key, 5 for S key, 6 for M key
86135-X100	FDDI-ST metalized adapter, 4-40, polymer sleeve X = 3 for A key, 4 for B key, 5 for S key, 6 for M key
86133A0000 86133A0300	FDDI-ST adapter, snap-in mount, removable keys, polymer sleeve FDDI-ST adapter, flange mount, removable keys, polymer sleeve
86231-0000	FDDI break-out kit
All of the connectors and break out kits above are available in gray. Substitute a "G" in the part number for the "-".	

Specifications subject to change

Custom Cable Assemblies

Molex will provide custom cable assemblies to your specification. Cable assemblies are tailored to your scheduling, quality and other requirements. Cable assemblies are 100% tested for optical performance. Molex uses statistical process controls and zero defect objectives in its manufacturing processes.

Contact your nearest Molex sales office for more information.

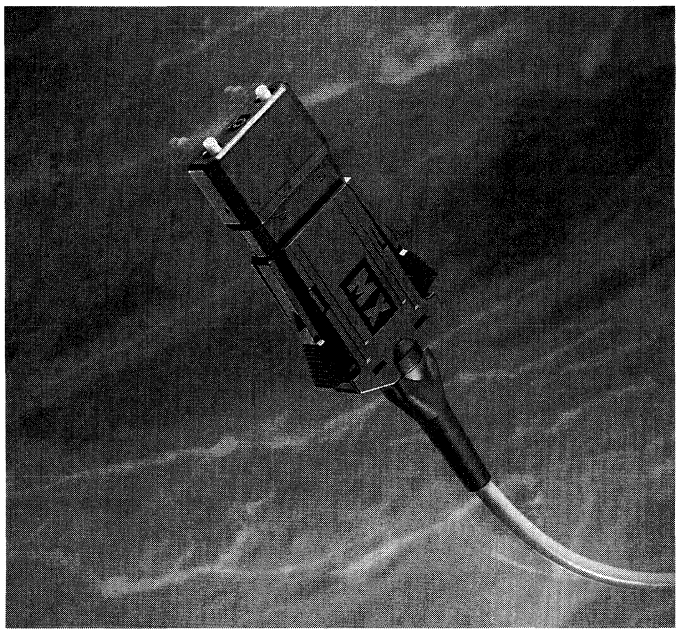
*ST is a registered trademark of AT&T

ESCON* Compatible Connector

Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

86040 Series

- Fully compatible with ESCON architecture
- Low insertion loss, 0.15 dB typ.
- Free-floating ferrule structure
- Pre-polished PC zirconia ceramic ferrules
- Positive latching mechanism
- Polarized housing



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Description

The 86040 Series fiber optic duplex connector system is specially designed for datacommunication applications within the Enterprise Systems Connection architecture (ESCON). This architecture was developed by IBM for high speed communications between storage devices, control unit interfaces, cluster controllers, and other networks such as FDDI, Ethernet and Token Ring. Fiber optic cable assemblies using this connector system are designed to replace bulky copper bus and tag cables.

The connector is designed using the latest engineered polymer and ceramic material technologies featuring zirconia ceramic PC ferrules and are available as custom cable assemblies from Molex. Cable assemblies are 100% tested for optical performance and are packaged in special blister packs.

Applications

Duplex ESCON single mode and multimode cable assemblies are used to interconnect control units, processors, workstations and peripherals using the IBM ESCON architecture. Using these fiber optic links now eliminates the need to have storage devices and other peripherals located in close proximity to the host computer. Devices can now be located on other floors or perhaps in other buildings at much greater distances away. Overall distances are dependent on device type and the number of ESCON directors used.

* ESCON is a registered trademark of IBM Corporation.

ESCON* Compatible Connector

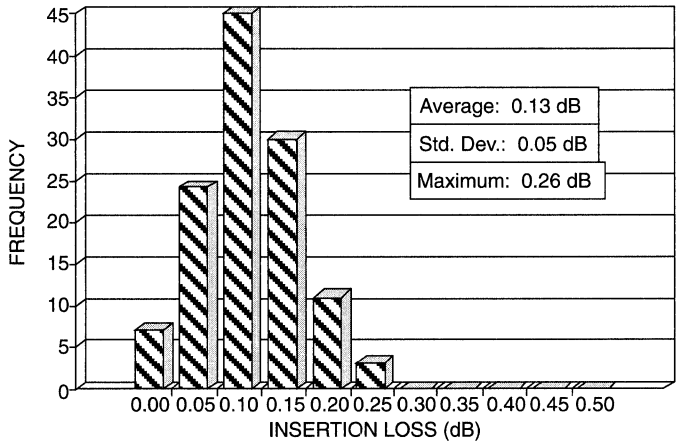
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708-803-3600

86040 Series

Optical Performances

Characteristics	Units	Mean	Sigma	Typ.	Comments
Insertion Loss:					
62.5/125 μm MM fiber	dB	0.13	0.05	0.15	measured at 1300nm
Variation between channel	ΔdB	0.08	0.06	0.1	

ESCON Connector
Insertion Loss (At 1300nm)



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Environmental Performance and Other Specifications

Characteristics	Units	Mean	Sigma	Max. Dev.	Comments
Durability	ΔdB			0.07	FOTP 21, 100 mate/unmate cycles
Humidity	ΔdB			0.13	FOTP 5, Method 1A, 60°C, 95% RH 240 Hours
Temperature Cycle	ΔdB			0.21	FOTP 3, modified to 2500 cycles, 10°C to 60°C, max ramp, zero dwell time
Cable Retention/Pull Test	ΔdB			0.16	FOTP 6, modified to 8 cycles at 1 m amd 3 m, 133 N ramp and hold 5 sec.
Coupling Strength/Axial Pull	ΔdB			0.04	FOTP 185, 20 lb, hold 30 sec.
Impact	ΔdB			0.05	FOTP 2A, 8 cycles
Flex	ΔdB			0.05	FOTP 1, 1 lb ± 45°, 300 times
Twist	ΔdB			0.10	FOTP 36A, 10lb at 0.1m ± 180°
Vibration	ΔdB			0.11	FOTP 11, 10 to 55Hz, 2 hours per axis
Insertion/Withdrawal Force	lb	5.3 Insertion 0.6 Withdrawal			Into AT&T receptacle

*ESCON is a registered trademark of IBM Corporation.

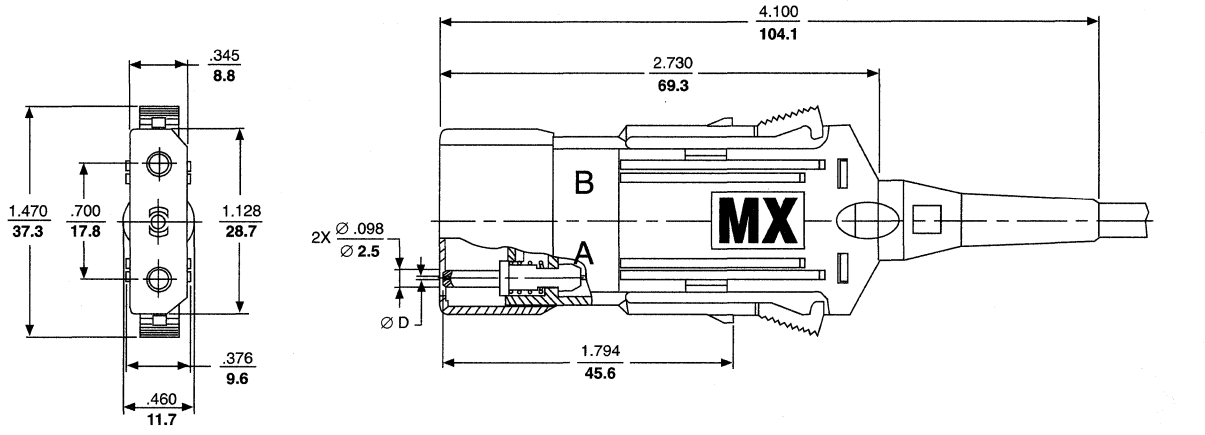
Specifications subject to change

ESCON* Compatible Connector

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86040 Series

Mechanical Dimensions



inch / mm

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Ordering Information

Order Number	Description
86040-3100	ESCON connector, multimode, zirconia ferrule, 4.8mm cable
86040-3200	ESCON connector, multimode, zirconia ferrule, zipcord cable
86040-5100	ESCON connector, single mode, zirconia ferrule, 4.8mm cable
86040-5200	ESCON connector, single mode, zirconia ferrule, zipcord cable
86140-0000	ESCON-ST** adapter, snap-in mount, zirconia sleeve
86140-0300	ESCON-ST adapter, flange mount, zirconia sleeve
86143-0000	ESCON-ST adapter, snap-in mount, polymer sleeve
86143-0300	ESCON-ST adapter, flange mount, polymer sleeve

* ESCON is a registered trademark of IBM Corporation.
** ST is a registered trademark of AT&T

ESCON* Compatible Connector

Fiber Optic
Interconnect
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86040 Series

Custom Cable Assemblies

Molex provides custom ESCON style cable assemblies. These assemblies are tailored to your exact connector configuration, length, and cable type. Each assembly is 100% tested for manufacturing integrity and optical performance. The following part number scheme should be used to develop custom assemblies to meet your specific needs.

Contact your nearest Molex sales office for more information or additional help in creating the proper part numbers.

Ordering Information

862 [4X] - [5X] [XX]

XX = Cable length in meters

Cable Type

51 = Duplex 62.5/125 multimode, zipcord cable
52 = Duplex 9/125 single mode, zipcord cable
53 = Duplex 62.5/125 multimode, round cable
54 = Duplex 9/125 single mode, round cable

Note: All cables meet IBM optical specifications

Connector Type

40 = ESCON - ESCON
41 = ESCON - ST** polymeric nut
42 = ESCON - STII**
43 = ESCON - FDDI
45 = ESCON - FCII
46 = ESCON - SC
47 = ESCON - ST** metal nut

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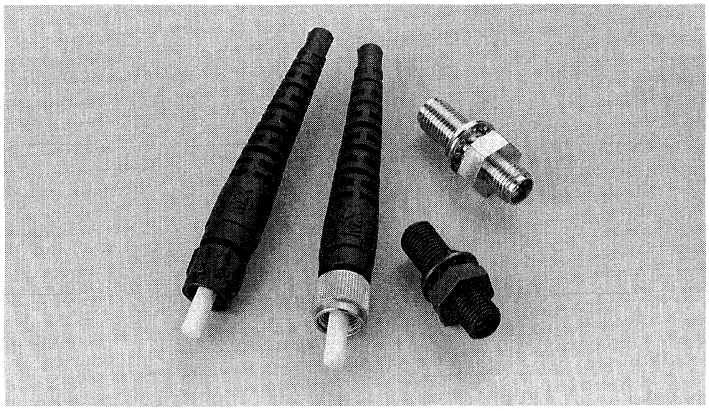
* ESCON is a registered trademark of IBM Corporation.
** ST and ST II are registered trademarks of AT&T.

SMA Connectors

Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

86020 & 86021 Series

- Low insertion loss*, 0.25 dB typ.
- SMA 905 compatible
- High performance pre-polished ceramic ferrule
- Controlled ferrule length
- Field installable
- Available with polymeric or metal coupling nut
- Crimpless screw type strength member retention with long boot
- Short boot crimp version
- Bare fiber version



* High performance results are obtained with Molex high performance adapter.

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Description

The 86020 & 86021 Series lightwave connectors are specially designed for datacommunication applications using multimode fiber cable. Molex 86020 & 86021 Series are fully compatible with all existing SMA-905 connector hardware. The connector is available with either a metal or engineered polymer coupling nut.

These Series are designed using the latest engineered polymer and ceramic material technologies. Combining unique termination features with a pre-polished ferrule, the 86020 & 86021 Series can be easily terminated in the field using Molex's 86720 tool kit.

Connector-to-connector mating is achieved by using a bulkhead feed-through adapter. Two types of adapters are available: a high performance polymeric version combining a precision-molded polymeric housing with a super-precision metal alloy alignment sleeve, and a full metal version according to the MIL-C-83522/3B specification.

Applications

- Local Area Network
- Data processing networks
- Active device termination
- Premise installation
- Instrumentation

SMA Connectors

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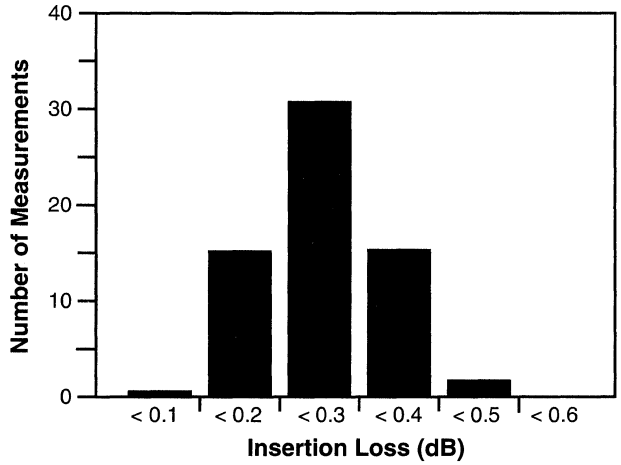
86020 & 86021 Series

Optical Performance

Characteristics	Units	Mean	Sigma	Typ.	Comments
Insertion Loss:					
(High performance adapter)					
50/125 μm MM fiber	dB	0.26	0.08	0.25	
62.5/125 μm MM fiber	dB	0.20	0.08	0.20	
100/140 μm MM fiber	dB	0.09	0.04	0.10	
(Standard adapter)					
62.5/125 μm MM fiber	dB	0.37	0.18	0.40	

Optical Performance Distribution

SMA Connector w/High Performance Adapter (50/125 μm fiber)



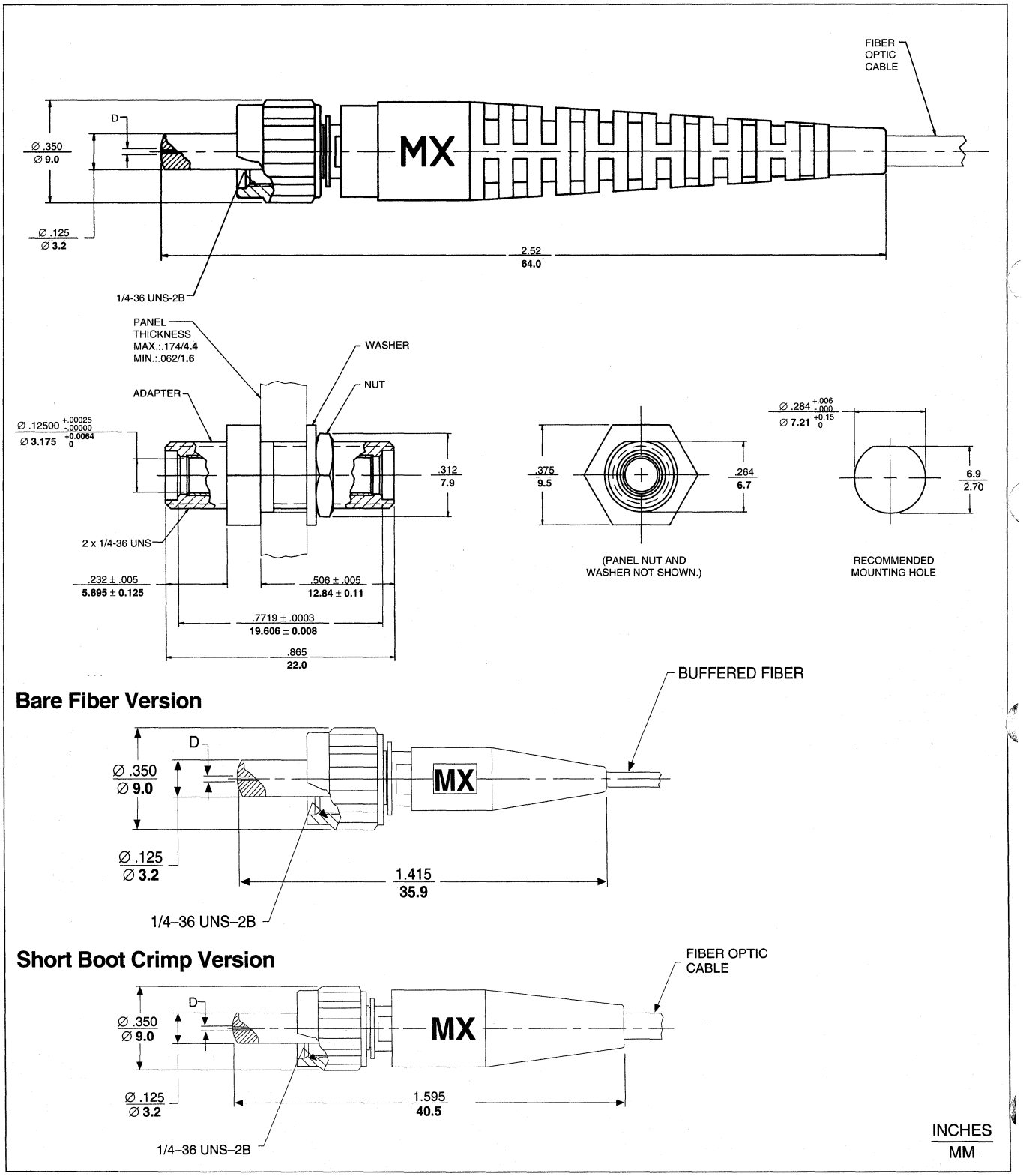
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Environmental Performance and Other Specifications

Characteristics	Units	Min.	Typ.	Max.	Comments
Durability	ΔdB	–	–	0.2	per FOTP-21A, 1000 cycles, cleaning every 100 cycles.
Temperature Range:					
Storage	°C	- 40	–	+80	may be further limited by cable specifications
Operating	°C	- 40	–	+80	may be further limited by cable specifications
Thermal Shock	ΔdB	–	–	0.2	- 40°C to +60°C, 10 cycles, per Bellcore TR-TSY-000326, section 4.3.8 & 5.3.8
Temperature Cycling	ΔdB	–	–	0.2	- 40°C to +80°C, 40 cycles with polymeric adapter
Humidity Cycling	ΔdB	–	–	0.2	+60°C at 95% RH for 504 hours (FOTP-5, type 1)
Cable Retention	ΔdB	–	–	0.2	40 lb. Load without adhesive (FOTP-6)
Cable OD	mm	–	3.0		
	mm	–	2.4		
Termination Time	min			5.0	avg. per connector, excluding epoxy curing

86020 & 86021 Series

Mechanical Dimensions



Bare Fiber Version

Short Boot Crimp Version

INCHES
MM

SMA Connectors

Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

86020 & 86021 Series

Ordering Information

Order Number	Description
86020-0000	SMA connector, multimode, 128µm, alumina ferrule, polymeric body & nut, long boot
86020-0200	SMA connector, multimode, 128µm, alumina ferrule, polymeric body & nut, short boot crimp
86020-0500	SMA connector, multimode, 128µm, alumina ferrule, polymeric body & nut, bare fiber
86020-1000	SMA connector, multimode, 144µm, alumina ferrule, polymeric body & nut, long boot
86020-1200	SMA connector, multimode, 144µm, alumina ferrule, polymeric body & nut, short boot crimp
86020-1500	SMA connector, multimode, 144µm, alumina ferrule, polymeric body & nut, bare fiber
86021-0000	SMA connector, multimode, 128µm, alumina ferrule, metal coupling nut, long boot
86021-0200	SMA connector, multimode, 128µm, alumina ferrule, metal coupling nut, short boot crimp
86021-0500	SMA connector, multimode, 128µm, alumina ferrule, metal coupling nut, bare fiber
86021-1000	SMA connector, multimode, 144µm, alumina ferrule, metal coupling nut, long boot
86021-1200	SMA connector, multimode, 144µm, alumina ferrule, metal coupling nut, short boot crimp
86021-1500	SMA connector, multimode, 144µm, alumina ferrule, metal coupling nut, bare fiber
86121-0000	SMA adapter, high performance, metal alignment sleeve, polymeric body
86122-0000	SMA adapter, metal body
86720-0000	SMA termination tool kit, with 110V/60Hz curing oven
86721-0000	SMA termination tool kit, with 220V/50Hz curing oven
86710-5000	Consumable replacement kit

Specifications subject to change

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Custom Cable Assemblies

Molex will provide custom cable assemblies to your specification. Cable assemblies are 100% tested for optical performance. Molex uses statistical process controls and zero defect objectives in its manufacturing processes.

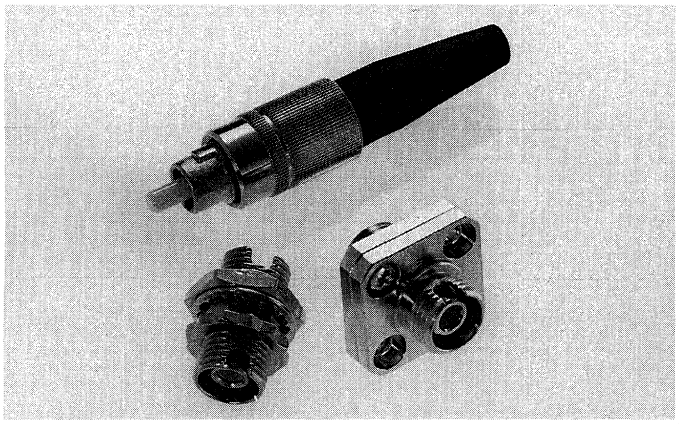
Contact your nearest Molex sales office for more information.

FC II Compatible Connector

Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

86057 Series

- Low insertion loss, 0.08 dB typ. single mode
- Low return loss, 46.1 dB typ.
- Meets NTT standards
- Non-Optical Disconnect design
- Meets Bellcore 326 Specifications
- High performance Super PC return loss
- PC radius zirconia ceramic ferrule
- Overmolded ferrule assembly
- Patented design
- Easy assembly process
- Low part count



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Description

The new 86057 Series lightwave connector is specially designed for telecommunications applications and is fully compatible with all existing FC/PC connector hardware. It features a true non-optical disconnect design with fewer components and is designed using the latest engineered polymer and ceramic material technologies. The 86057 Series connector can be easily terminated in the field using Molex's 86757 Series Tool Kit.

Connector to connector mating is achieved by using a bulkhead feed-through adapter. The adapter combines a metal housing and a super-precision zirconia alignment split sleeve. The adapter is available with a square flange or a "D" hole mount configuration.

The ferrule end face features a pre-polished "PC" profile with a convex spherical radius end. This facilitates fast polishing of the fiber to ensure a high performance physical contact (PC and Super PC) profile.

Applications

- Telecommunication networks
- CATV
- Active device termination
- Premise installations
- Instrumentation
- Datacommunications networks

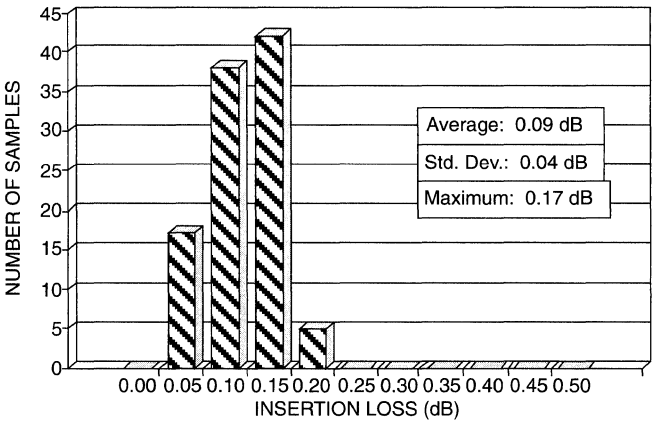
FC II Compatible Connector

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708-803-3600

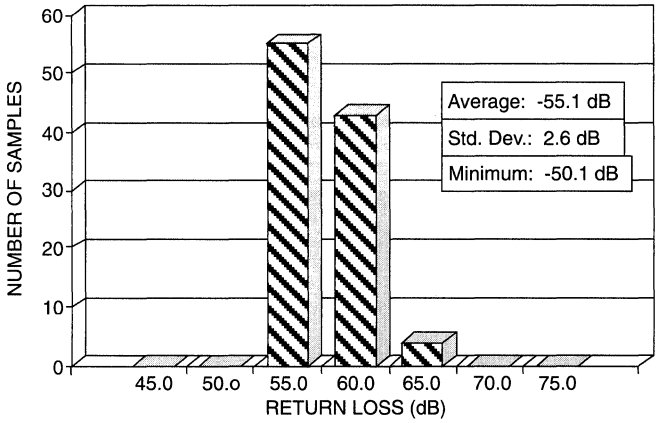
86057 Series

Optical Performance Distribution

FC(II) Single Mode Connector
Insertion Loss Test (At 1550 nm)

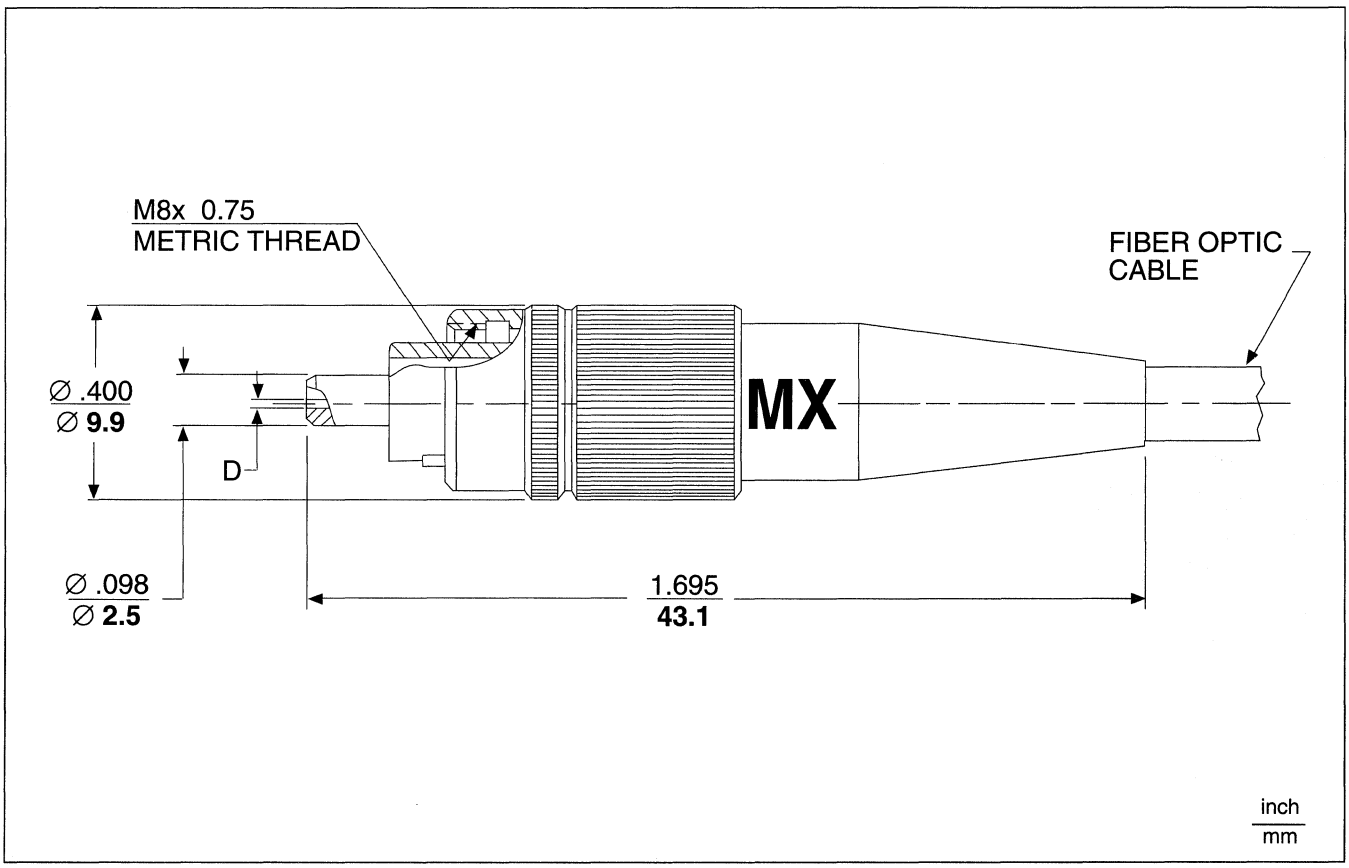


FC(II) Single Mode Connector
Return Loss Test (At 1550 nm)



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Mechanical Dimensions



FC II Compatible Connector

molex®
Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

86057 Series

Optical Performance

Characteristics	Units	Mean	Sigma	Typ.	Comments
Insertion Loss:					
9/125 µm SM fiber	dB	0.10	0.04	0.15	Measured at 1300nm
9/125 µm SM fiber	dB	0.09	0.04	0.15	Measured at 1550nm
50/125 µm MM fiber	dB	0.06	0.04	0.10	Measured at 1300nm
Return Loss:					
Single mode	dB	-31.0		<-30	PC Polish
Single mode	dB	-54.1	2.5	<-45	Super PC polish measured at 1300nm
Single mode	dB	-55.1	2.6	<-45	Super PC polish measured at 1550nm

Environmental Performance and Other Specifications

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Characteristics	Units	Min.	Typ.	Max.	Comments
Durability	ΔdB	–	–	0.07	FOTP - 21 1000 cycles, cleaning every 100 cycles
Temperature Range					
Storage	°C	-40	–	80	May be further limited by cable specifications
Operating	°C	-40	–	80	May be further limited by cable specifications
Thermal Shock	ΔdB	–	–	0.1	Bellcore TR-TSY-000326, section 4.3.8 & 5.3.8
Thermal Aging	ΔdB	–	–	0.09	FOTP - 4, 85°C 14 days
Temperature Cycling	ΔdB	–	–	0.13	Bellcore TR-TSY-000326, -40°C to 70°C 42 cycles
Humidity Cycling	ΔdB	–	–	0.13	FOTP - 5, 95% RH, 60°C 14 days
Flex Test	ΔdB	–	–	0.05	Bellcore TR-TSY 000326 0.9 Kg, 100 cycles
Twist Test	ΔdB	–	–	0.03	Bellcore TR-TSY-000326, 3 lb load
Proof Test	ΔdB	–	–	0.05	Bellcore TR-TSY-000326 10 lb at 90°, 15 lb at 0°
Straight Pull Test	ΔdB	–	–	0.03	Bellcore TR-TSY-000326, 4 lb load
Termination Time	min.	–	–	6.5	Average per connector, excluding epoxy cure time
Cable OD	mm	–	3.0	–	
	mm	–	2.4	–	

Note: Contact Molex Fiber Optics for a complete test report

FC II Compatible Connector

molex® Fiber Optic Interconnect Technologies, Inc.™
708-803-3600

86057 Series

Ordering Information

Order Number	Description	Cable Size
86057-3000	FC II connector, 128µm multimode, PC zirconia ferrule	3.0mm
86057-6000	FC II connector, 128µm multimode, flat ceramic ferrule	3.0mm
86057-5000	FC II connector, 126µm single mode, PC zirconia ferrule	3.0mm
86057-7000	FC II connector, 127µm single mode, PC zirconia ferrule	3.0mm
86058-3000	FC II connector, 128µm multimode, PC zirconia ferrule	2.0-2.4mm
86058-6000	FC II connector, 128µm multimode, flat ceramic ferrule	2.0-2.4mm
86058-5000	FC II connector, 126µm single mode, PC zirconia ferrule	2.0-2.4mm
86058-7000	FC II connector, 127µm single mode, PC zirconia ferrule	2.0-2.4mm
86152-0000	FC adapter, zirconia alignment sleeve, square mounting flange	
86152-1000	FC adapter, zirconia alignment sleeve, "D" hole mounting	
86757-0010	FC II add on tool kit (assembly tool, curing fixture, cable insert tool, crimp tool and stripping template) - to be used with standard FC tool Kit (86750-0000)	
86757-0000	FC II termination tool kit with 110V/60Hz curing oven	
86757E0000	FC II termination tool kit with 220V/50Hz curing oven	
86710-5000	Consumable replacement kit	
86757-3010	FC II connector assembly tool	
86757-3020	FC II curing fixture	
86757-5001/2	FC II crimp dies (both 5001 & 5002 required)	
86757-0001	FC II cable prep template	
86757-3030	FC II cable insert tool	

Specifications subject to change

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Custom Cable Assemblies

Molex will provide custom cable assemblies to your specification. Cable assemblies are 100% tested for optical performance. Molex uses statistical process controls and zero defect objectives in its manufacturing processes.

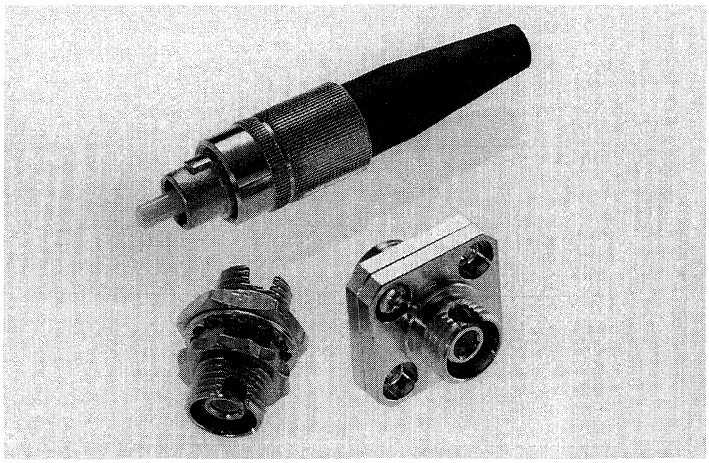
Contact your nearest Molex sales office for more information.

FC/PC Connector

Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

86051 Series

- Low insertion loss, 0.1 dB typ. multimode 0.15 dB typ. single mode
- Low return loss, (single mode) - 31 dB typ., PC - 45 dB typ., Super PC (special processes required)
- Compatible with NTT-FC and NEC-D3 hardware
- One piece design for easy field termination
- High performance pre-polished PC ferrule
- Multimode & single mode versions
- 900 micron bare fiber version



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Description

The 86051 Series lightwave connector is specially designed for telecommunications applications and is fully compatible with all existing FC/PC connector hardware. Both multimode and single mode versions are available. This connector is designed using the latest engineered polymer and ceramic material technologies. It also features a one piece connector design (not including the strength member retention and the bend relief boot) for ease of termination. The 86051 Series can be easily terminated in the field using Molex's 86750 Series tool kit.

Connector-to-connector mating is achieved by using a bulkhead feed-through adapter. The adapter combines a metal housing and a super-precision zirconia alignment sleeve. The adapter is available with a square flange or a "D" hole mount.

The ferrule end face features a pre-polished "PC" profile with a convex spherical end. This allows for fast polishing of the fiber to ensure high performance physical contact, "PC" and super "PC".

Applications

- Telecommunication networks
- Active device termination
- Premise installations
- Instrumentation
- Datacommunications networks

FC/PC Connector

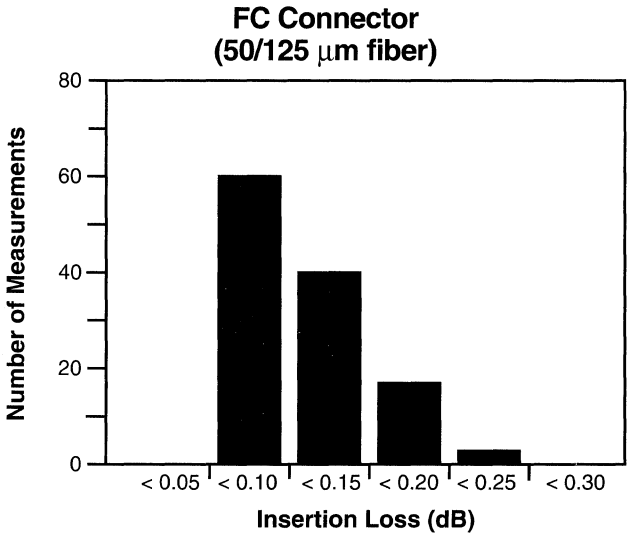
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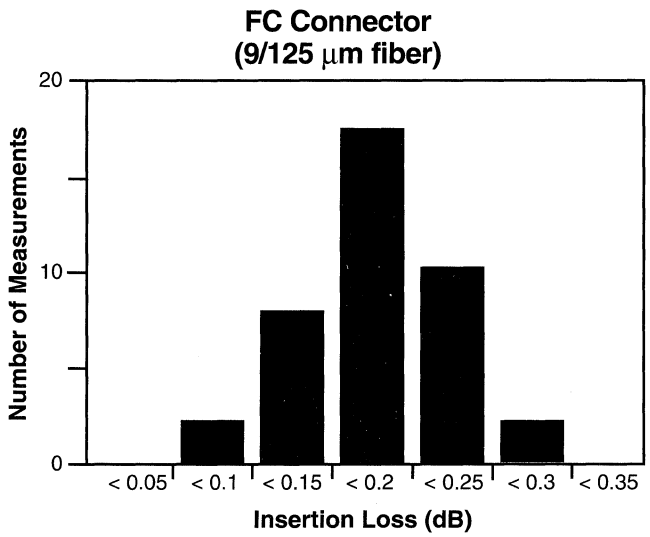
86051 Series

Optical Performance

Characteristics	Units	Mean	Sigma	Typ.	Comments
Insertion Loss					
9/125 μm SM fiber	dB	0.13	0.05	0.15	
50/125 μm MM fiber	dB	0.06	0.04	0.10	
Return Loss:					
Single mode	dB	–	–	<-31.0	PC polish
Single mode	dB	–	–	<-45.0	Super PC polish (special process required)

Optical Performance Distribution





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Environmental Performance and Other Specifications

Characteristics	Units	Min.	Typ.	Max.	Comments
Durability	ΔdB	–	–	0.1	per FOTP-21A, 1000 cycles cleaning every 100 cycles
Temperature Range					
Storage	°C	-40	–	+80	may be further limited by cable specifications
Operating	°C	-40	–	+80	may be further limited by cable specifications
Thermal Shock	ΔdB	–	–	0.1	-40°C to +60°C, 10 cycles, per Bellcore TR-TSY-000326, section 4.3.8 & 5.3.8
Temperature Cycling	ΔdB	–	–	0.1	-40°C to +80°C, 40 cycles
Humidity Cycling	ΔdB	–	–	0.1	+60°C at 95% RH for 504 hours (FOTP-5, type 1)
Cable Retention	ΔdB	–	–	0.2	40 lb. load without adhesive (FOTP-6)
Cable OD	mm	–	3.0		
	mm	–	2.4		
Termination Time	min			5.0	avg. per connector, excluding epoxy curing

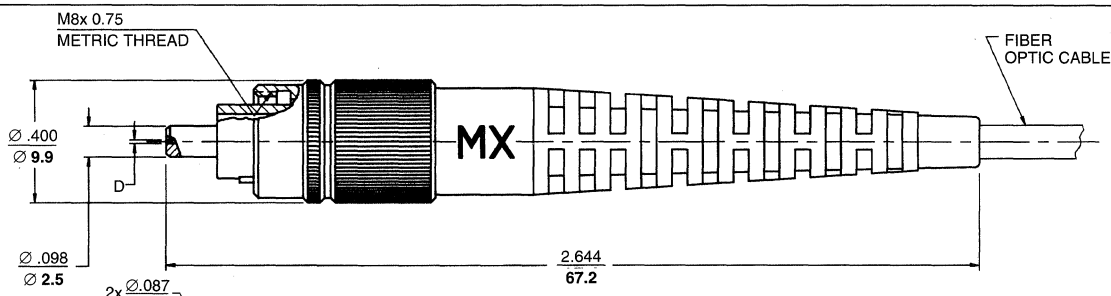
FC/PC Connector

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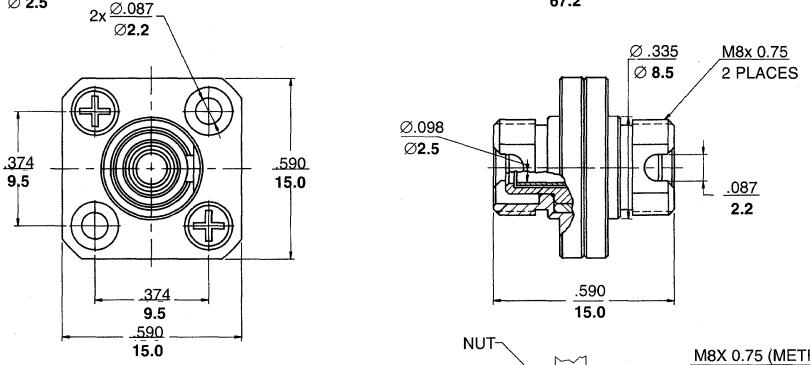
86051 Series

Mechanical Dimensions

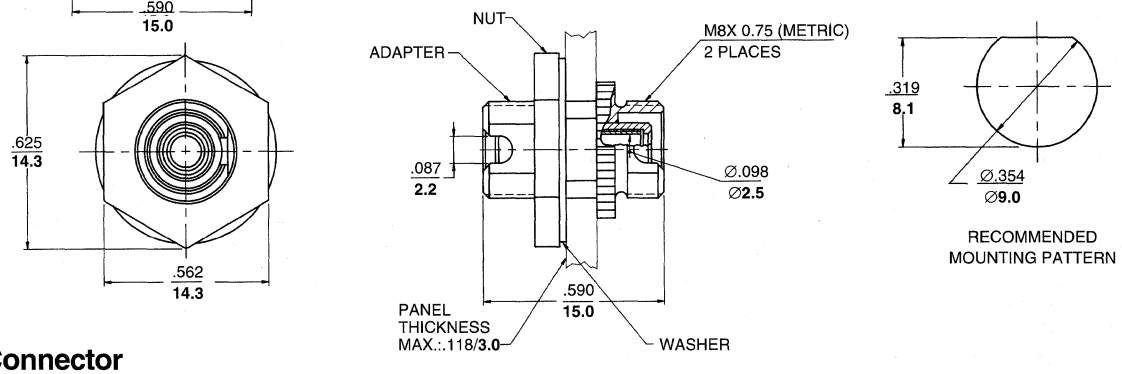
Connector



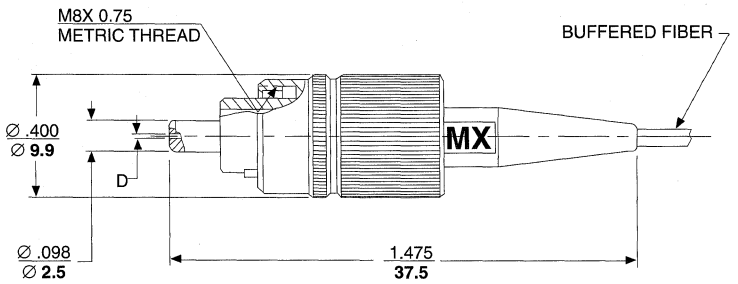
Adapter
(Square Flange Type)



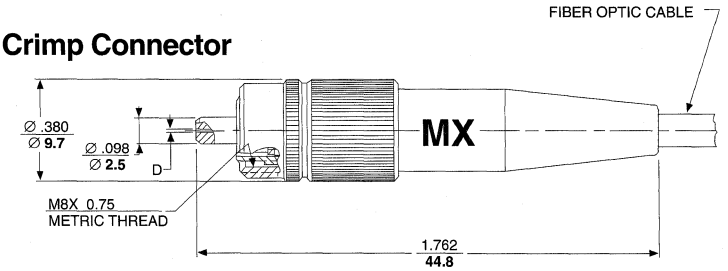
Adapter
(D-Hole Type)



Bare Fiber Connector



Short Boot Crimp Connector



INCHES
MM

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FC/PC Connector

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86051 Series

Ordering Information

Order Number	Description	Cable size
86051-3500	FC/PC Connector, multimode, 128μm zirconia ferrule, bare fiber	900μm bare fiber
86051-6500	FC/PC Connector, multimode, 128μm flat ceramic ferrule, bare fiber	900μm bare fiber
86051-5500	FC/PC Connector, single mode, 126μm zirconia ferrule, bare fiber	900μm bare fiber
86051-7500	FC/PC Connector, single mode, 127μm zirconia ferrule, bare fiber	900μm bare fiber
86152-0000	FC Adapter, zirconia alignment sleeve, square mounting flange	
86156-0000	FC Adapter, phosphorous bronze sleeve, square mounting flange	
86152-1000	FC Adapter, zirconia alignment sleeve, "D" hole mounting	
86156-1000	FC Adapter, phosphorous bronze sleeve, "D" hole mounting	
86172-0000	FC to ST* Adapter, zirconia alignment sleeve, "D" hole mount	

Specifications subject to change

Custom Cable Assemblies

Molex will provide custom cable assemblies to your specifications. Cable assemblies are 100% tested for optical performance. Molex uses statistical process controls and zero defect objectives in its manufacturing processes.

Contact your nearest Molex sales office for more information.

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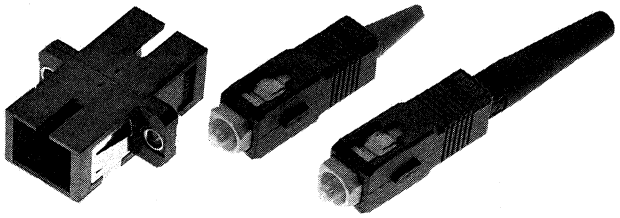
* ST is a registered trademark of AT&T.

SC Connector

Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

86061 Series

- Low insertion loss, 0.15 dB typ. multimode
  0.2 dB typ. single mode
- Low return loss, 18 dB typ. multimode
  32 dB typ. single mode (PC)
  95 dB typ. single mode (super PC) - special process required
- Compatible with NTT SC Standard
- Push-pull coupling
- High performance pre-polished PC ferrule
- Field installable
- Multimode & single mode version
- Adapters are gang mountable
- For 2.4 & 3.0mm simplex cable
- Bare fiber version



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Description

The 86061 Series lightwave connector is specially designed for distribution applications and is fully compatible with all existing SC type connector hardware. The unique push-pull mating design allows this connector to be gang mountable and makes it ideal for limited space requirements.

The connector is available in several styles to accommodate 2.4mm and 3.0mm jacketed cable and 900 micron buffered bare fiber. Each style is also available in both multimode and single mode versions.

The connector is designed using the latest engineered polymer and ceramic material technologies. Combining unique termination features with a pre-polished PC ceramic ferrule, the 86061 Series SC connector can be easily terminated in the field using Molex's 86760 Series tool kit.

Connector-to-connector mating is achieved by using a bulkhead feed-through adapter. This adapter combines a molded polymeric housing and a super-precision ceramic alignment sleeve.

Applications

- Local Area Networks
- Data processing networks
- Telecommunications networks
- Subscriber transmission systems
- CATV
- Active device termination
- Premise installations
- Measurement equipment

SC Connector

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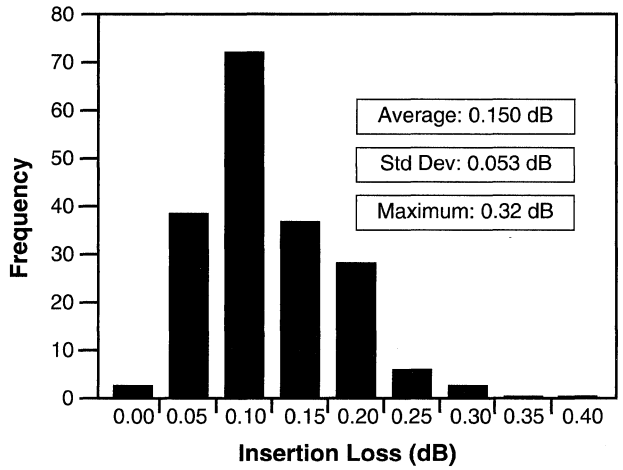
86061 Series

Optical Performance

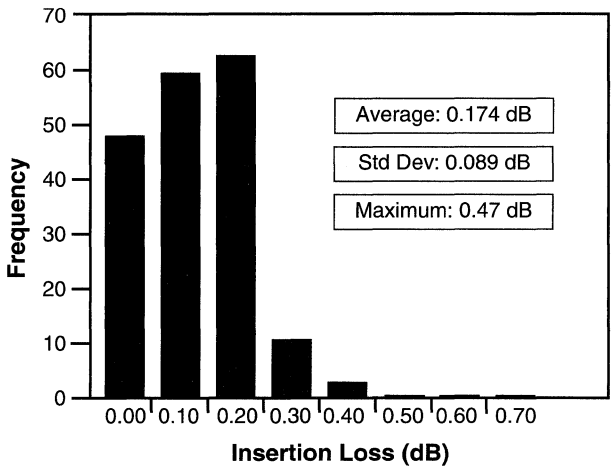
Characteristics	Units	Mean	Sigma	Typ.	Comments
Insertion Loss					
9/125 μm SM fiber	dB	0.18	0.09	0.20	
50/125 μm MM fiber	dB	0.15	0.08	0.15	
62.5/125 μm MM fiber	dB	0.09	0.05	0.10	
100/140 μm MM fiber	dB	0.08	0.05	0.05	
Return Loss					
Multimode	dB	–	–	<-18	
Single mode	dB	–	–	<-32	PC polish
Single mode	dB	–	–	<-45	Super PC polish - special process required

Optical Performance Distribution

SC Connector Insertion Loss Multimode 50/125 fiber



SC Single Mode Connector Insertion Loss Measurement



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Environmental Performance and Other Specifications

Characteristics	Units	Min.	Typ.	Max.	Comments
Durability	ΔdB	–	–	0.1	per FOTP-21A, 1000 cycles, cleaning every 100 cycles.
Temperature Range					
Storage	°C	- 40	–	+80	may be further limited by cable specifications
Operating	°C	- 40	–	+80	may be further limited by cable specifications
Thermal Shock	ΔdB	–	–	0.1	- 40°C to +60°C, 10 cycles, per Bellcore TR-TSY-000326, section 4.3.8 & 5.3.8
Temperature Cycling	ΔdB	–	–	0.1	- 40°C to +80°C, 40 cycles
Humidity Cycling	ΔdB	–	–	0.1	+60°C at 95% RH for 504 hours (FOTP-5, type 1)
Cable Retention	ΔdB	–	–	0.2	40 lb. Load without Adhesive (FOTP-6)
Cable OD	mm	–	3.0		
	mm	–	2.4		
Termination Time	min			7.0	avg. per connector, excluding epoxy curing

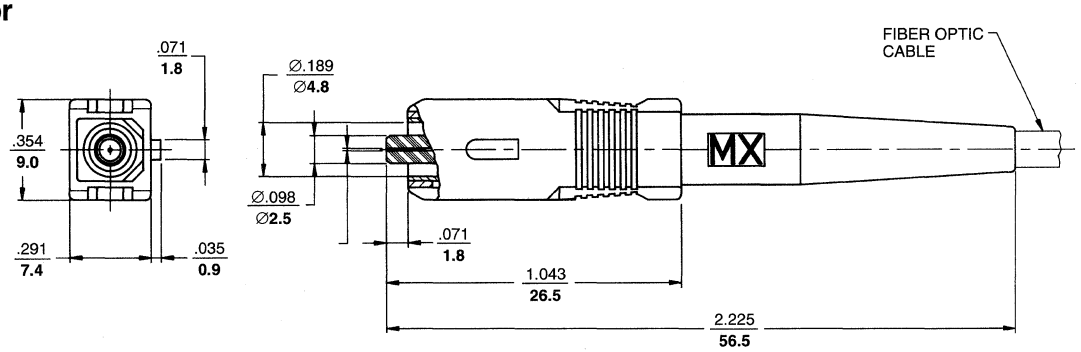
SC Connector

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708-803-3600

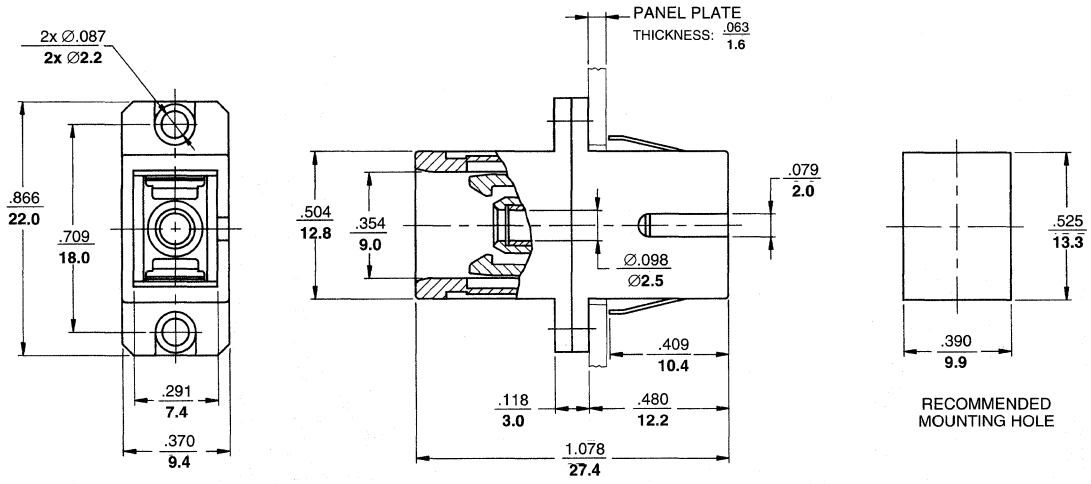
86061 Series

Mechanical Dimensions

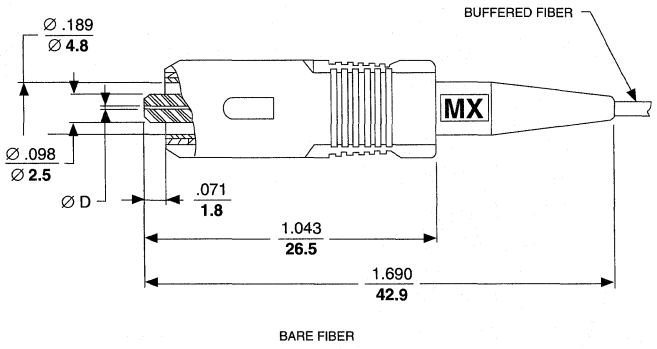
Connector



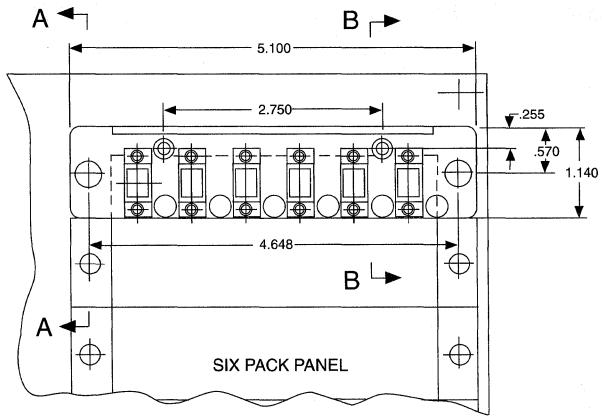
Adapter



Bare Fiber Connector



Six Pack Panel



INCHES
MM

SC Connector

Fiber Optic
Interconnect
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708-803-3600

86061 Series

Ordering Information

Order Number	Description	Cable size
86061-3000	SC connector, multimode, 125µm fiber, zirconia PC ferrule	3.0mm
86061-3300	SC connector, multimode, 125µm fiber, zirconia PC ferrule	2.4mm
86061-3500	SC connector, multimode, 125µm fiber, zirconia PC ferrule, bare fiber	900µm bare fiber
86061-5000	SC connector, single mode, 125µm fiber, zirconia PC ferrule	3.0mm
86061-5300	SC connector, single mode, 125µm fiber, zirconia PC ferrule	2.4mm
86061-5500	SC connector, single mode, 125µm fiber, zirconia PC ferrule, bare fiber	900µm bare fiber
86161-0000	SC adapter, zirconia alignment sleeve, polymeric housing	
86160-0000	SC adapter, phosphor bronze sleeve, polymeric housing	
86760-0000	SC termination tool kit, with 110V/60Hz curing oven	
86761-0000	SC termination tool kit, with 220V/50Hz curing oven	
86710-5000	Consumable replacement kit	
86800-6600	"Six Pack" SC adapter panel with adapters	

Specifications subject to change

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Custom Cable Assemblies

Molex will provide custom cable assemblies to your specifications, including PC or Super PC polishing. Cable assemblies are 100% tested for optical performance. Molex uses statistical process controls and zero defect objectives in its manufacturing processes.

Contact your nearest Molex sales office for more information.

Jumper Cable Assemblies

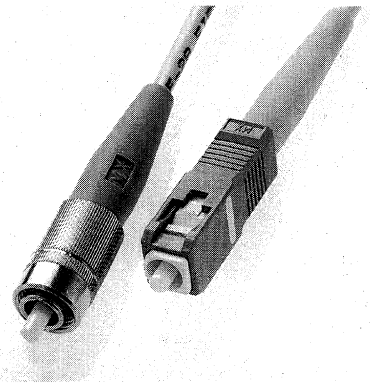
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864XX Series
APC Cable Assemblies
Angle Physical Contact

- Industry standard: FC, SC connector
- Standard and custom lengths
- 8° Angle Physical Contact (APC)

Performance

- Insertion loss < 0.30 dB
- Return loss > 60.0 dB



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Description

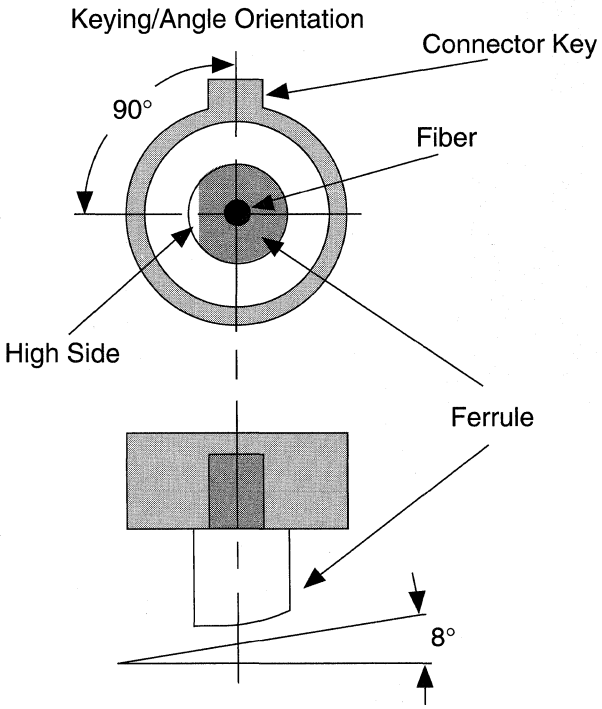
Molex 864XX Series cable assemblies are based on Molex industry standard FC and SC connector series.

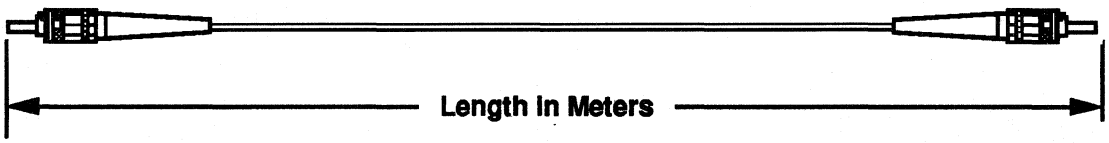
Each cable assembly is fully compatible with its respective industry standard interface dimension, and provides high quality assemblies for any high performance telecommunications application where traditional super PC performance is not sufficient.

Each assembly is 100% tested for optical performance.

Applications

- Telecommunication networks
- CATV networks





Jumper Cable Assemblies

molex® Fiber Optic Interconnect Technologies, Inc.™
708-803-3600

864XX Series
APC Cable Assemblies

Ordering Information **STANDARD CABLE ASSEMBLY**

86	4	XX	-	XX	XX

XX = Cable length in meters

Cable Assembly

4 = APC

Connector Type

50 = FCII to FC II, PC zirconia ferrule

56 = FCII to SC, PC zirconia ferrule

60 = SC to SC, PC zirconia ferrule

Cable Specification:

43 = Simplex, 9/125µm fiber, 3mm riser cable, yellow jacket

47 = Duplex, 9/125µm fiber, zipcord 3x6.5mm riser cable, yellow jacket

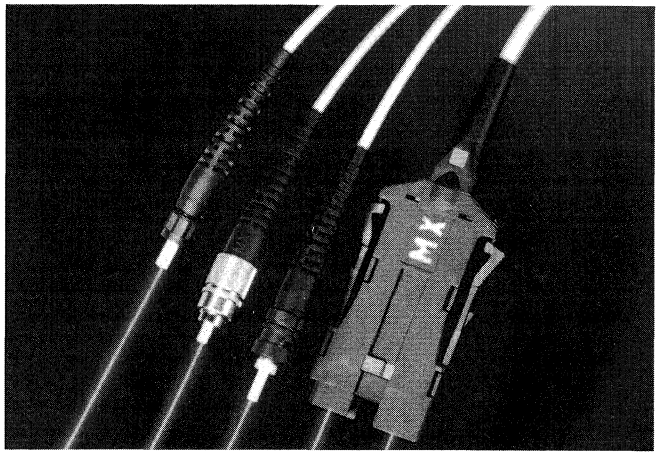
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Jumper Cable Assemblies

Fiber Optic
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Technologies, Inc.™
708-803-3600

862XX & 863XX Series

- Industry standard: ST*, ST II*, SMA, FC, SC, FDDI, and ESCON**
- Standard and custom lengths
- Dry connection, with physical contact PC and Super PC polish



Performance

- 862XX Series insertion loss <0.4 dB multimode
  insertion loss <0.2 dB single mode
  return loss <- 45dB single mode
- 863XX Series insertion loss <0.2dB single mode
  return loss <- 50dB single mode

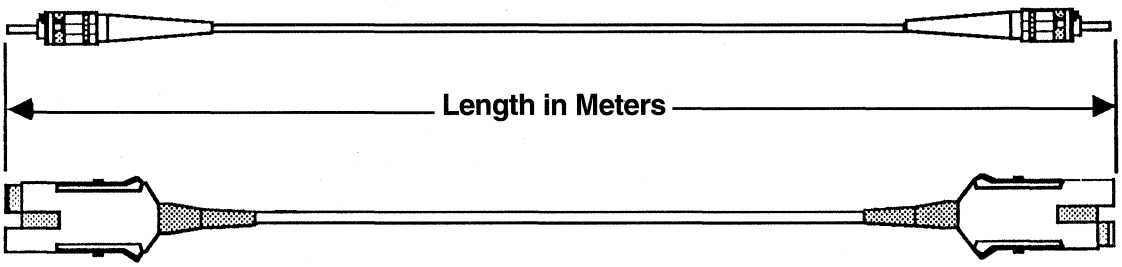
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Description

Molex 862XX and 863XX Series cable assemblies are based on Molex industry standard ST, ST II, SMA, FC, SC, FDDI, and ESCON connector series. Each cable assembly is fully compatible with its respective industry standard, and provides high quality assemblies for any datacommunication or telecommunication application. Each assembly is 100% tested for optical performance.

Applications

- Datacommunication
- Building wiring
- Telecommunication network
- Local Area Network



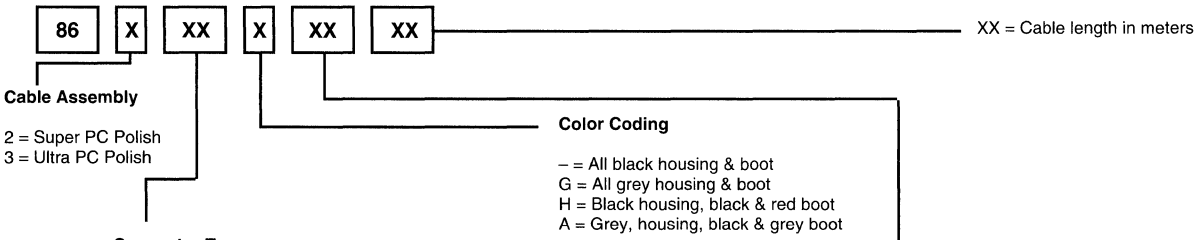
* ST and ST II are registered trademarks of AT&T.
** ESCON is a registered trademark of IBM Corporation.

Jumper Cable Assemblies

molex® Fiber Optic Interconnect Technologies, Inc.™
708-803-3600

862XX / 863XX Series

Ordering Information STANDARD CABLE ASSEMBLY



Cable Assembly

2 = Super PC Polish
3 = Ultra PC Polish

Connector Type

11 = ST* to ST, polymer nut, PC zirconia ferrule, long boot
12 = ST to ST, polymer nut, stainless steel ferrule, long boot
13 = ST to ST, polymer nut, MX + ceramic ferrule, long boot
14 = ST to ST, polymer nut, crimp, PC zirconia ferrule, short boot
15 = ST to ST, polymer nut, crimp, stainless steel ferrule, short boot
16 = ST to ST, polymer nut, crimp, MX + ceramic ferrule, short boot
17 = ST to ST, polymer nut, PC zirconia ferrule, 900µm boot
18 = ST to ST, polymer nut, stainless steel ferrule, 900µm boot
19 = ST to ST, polymer nut, MX + ceramic ferrule, 900µm boot

20 = SMA to SMA, metal nut, long boot, ceramic ferrule

21 = ST to ST, metal nut, PC zirconia ferrule, long boot
22 = ST to ST, metal nut, stainless steel ferrule, long boot
23 = ST to ST, metal nut, MX + ceramic ferrule, long boot
24 = ST to ST, metal nut, crimp, PC zirconia ferrule, short boot
25 = ST to ST, metal nut, crimp, stainless steel ferrule, short boot
26 = ST to ST, metal nut, crimp, MX + ceramic ferrule, short boot
27 = ST to ST, metal nut, PC zirconia ferrule, 900µm boot
28 = ST to ST, metal nut, stainless steel ferrule, 900µm boot
29 = ST to ST, metal nut, MX + ceramic ferrule, 900µm boot

30 = FDDI to FDDI, PC zirconia ferrule
31 = Breakout kit (See data sheet)
32 = FDDI to FDDI, MX + ceramic ferrule
33 = FDDI to ST polymer nut, PC zirconia ferrule
34 = FDDI to ST polymer nut, MX + ceramic ferrule
35 = FDDI to ST metal nut, PC zirconia ferrule
36 = FDDI to ST metal nut, MX + ceramic ferrule
37 = FDDI to ST II, PC zirconia ferrule
38 = FDDI to ST II, MX + ceramic ferrule
39 = FDDI to ST II NOD, PC zirconia ferrule

40 = ESCON** to ESCON, PC zirconia ferrule
41 = ESCON to ST polymer nut, PC zirconia ferrule
42 = ESCON to ST II, PC zirconia ferrule
43 = ESCON to FDDI, PC zirconia ferrule
44 = ESCON to FC II, PC zirconia ferrule
45 = ESCON to SC, PC zirconia ferrule
46 = ESCON to ST metal nut, PC zirconia ferrule

50 = FCII to FC II, PC zirconia ferrule
51 = FCII to ST polymer nut, PC zirconia ferrule
52 = FCII to ST II, PC zirconia ferrule
53 = FCII to ST II, PC zirconia ferrule
54 = FCII to ST II NOD, PC zirconia ferrule
56 = FCII to SC, PC zirconia ferrule
57 = FC to FC, bare fiber, PC zirconia ferrule
58 = FC II to FDDI, PC zirconia ferrule
59 = FC II to FDDI, MX + ceramic ferrule

Color Coding

– = All black housing & boot
G = All grey housing & boot
H = Black housing, black & red boot
A = Grey, housing, black & grey boot

Cable Specification

40 = Simplex, 50/125µm fiber, 3mm riser cable, orange jacket
41 = Simplex, 62.5/125µm fiber, FDDI spec, 3mm riser cable, grey jacket
42 = Simplex, 100/140µm fiber, 3mm riser cable, orange jacket
43 = Simplex, 9/125µm fiber, 3mm riser cable, yellow jacket

44 = Duplex, 50/125µm fiber, zipcord 3x6.5mm riser cable, orange jacket
45 = Duplex, 62.5/125µm fiber, zipcord 3x6.5mm riser cable, grey jacket
46 = Duplex, 100/140µm fiber, zipcord 3x6.5mm riser cable, orange jacket
47 = Duplex, 9/125µm fiber, zipcord 3x6.5mm riser cable, yellow jacket

48 = Duplex, 62.5/125µm fiber, round 4.8mm riser cable, grey jacket
49 = Duplex, 9/125µm fiber, round 4.8mm riser cable, yellow jacket

50 = Simplex, 9/125µm fiber, 900µm buffered fiber

51 = Simplex, 9/125µm fiber, zipcord cable, ESCON specification
52 = Duplex 9/125µm fiber, zipcord cable, ESCON specification
53 = Duplex, 62.5/125µm fiber, round 4.8mm cable, ESCON specification
54 = Duplex 9/125µm fiber, round 4.8mm cable, ESCON specification

60 = SC to SC, PC zirconia ferrule
61 = SC to ST polymer nut, PC zirconia ferrule
62 = SC to ST metal nut, PC zirconia ferrule
63 = SC to ST II, PC zirconia ferrule
64 = SC to ST II NOD, PC zirconia ferrule
65 = SC to FDDI, PC zirconia ferrule
66 = SC to SC, PC zirconia ferrule, bare fiber

81 = ST II to STII, PC zirconia ferrule
82 = ST II to STII, stainless steel ferrule
83 = ST II to STII, MX + ceramic ferrule
84 = ST II to STII, NOD, PC zirconia ferrule
85 = ST II to STII, NOD, stainless steel ferrule
86 = ST II to STII, NOD, MX + ceramic ferrule

Custom Cable Assemblies

Contact your nearest Molex sales office for more information.

*ST is a registered trademark of AT&T
**ESCON is a registered trademark of IBM Corporation

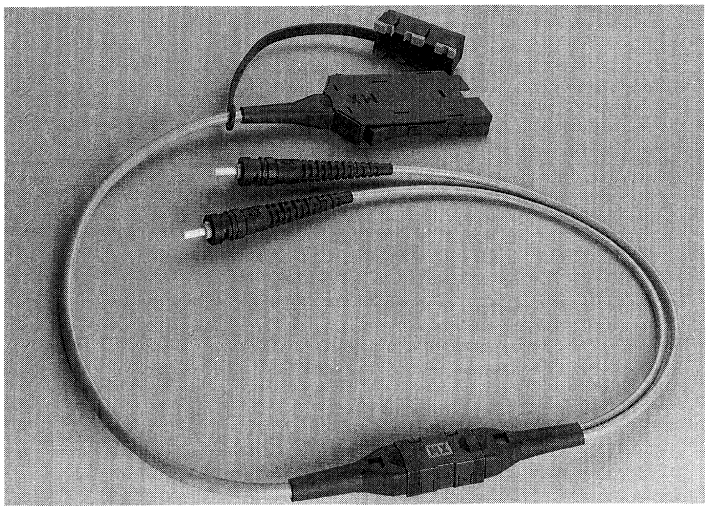
Specifications subject to change

Break-Out Kit

Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

86231-0000 Series

- Two fiber break-out kit
- Easy to assemble, one step crimp
- Elegant compact design
- Pre-assembled, simplex leads
- Can accommodate up to 900µm buffered fiber, single mode or multimode
- Accommodates up to 4.8mm duplex round jacketed cable
- Field installable



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Description

The 86231 Series break-out kit has a unique compact design which allows a round, two-channel cable to convert into two simplex cables. Conversely, this kit is also ideal for terminating either two multimode or two single mode simplex connectors onto a round duplex cable.

The break-out kit can easily be terminated in the field using the instructions on the following page. It is also available in grey (86231G0000).

Applications

- Local Area Networks
- Duplex fiber optic systems
- Any FDDI Network

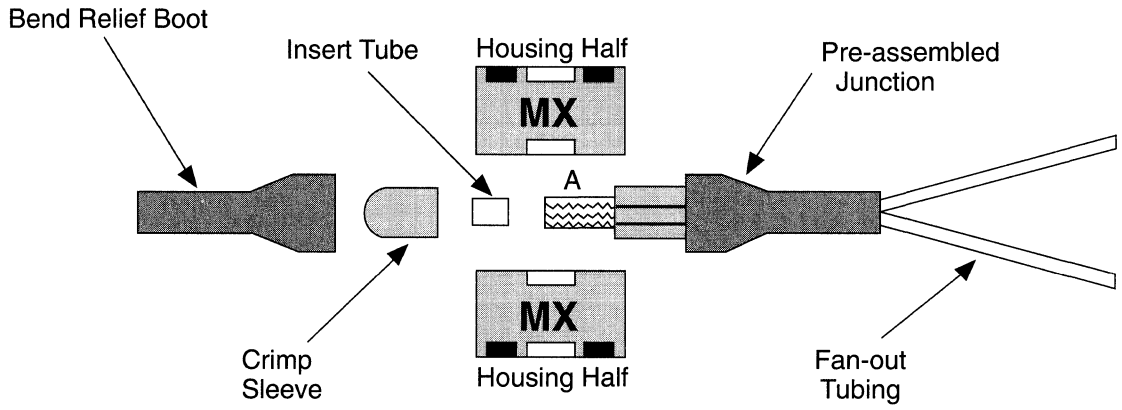
Ordering Information

Order Number	Description	Fan-Out Tubing	Housing Unit
86231Y0000	Break-out kit	Yellow	Black
86231-0000	Break-out kit	Orange	Black
86231G0000	Break-out kit	Grey	Grey

Break-Out Kit

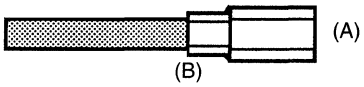
Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

86231-0000 Series

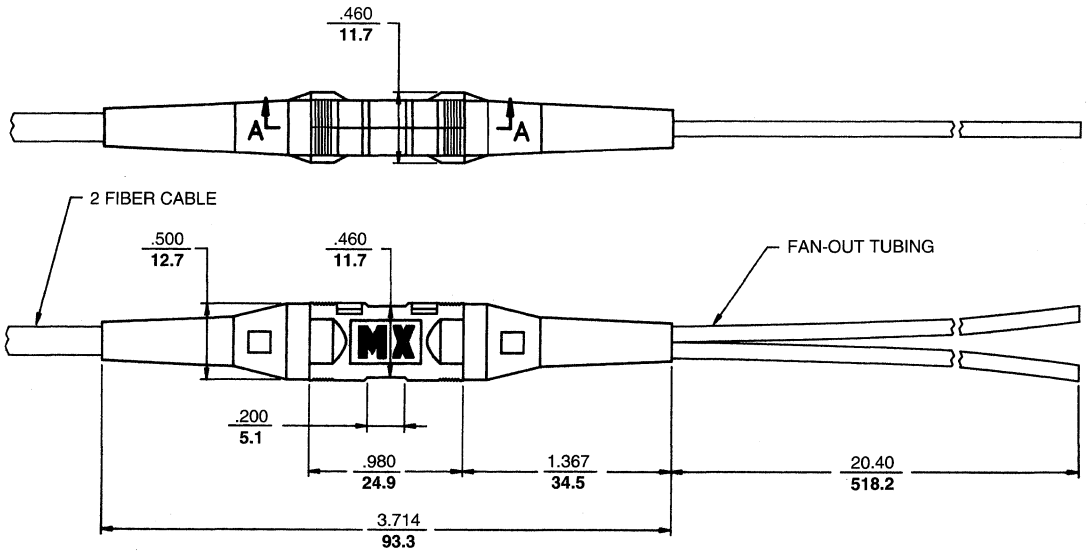


Assembly Instruction

1. Insert the duplex cable into the bend relief boot and the crimp sleeve.
2. Strip the outer jacket of the duplex cable. The length is determined by the length required for the fan-out tubing. (Add at least 3" for the assembly of the connector.)
3. Insert the two fibers into the small insert. Push the small insert under the Kevlar and outer jacket using Molex insert tool, Order No. 86730-3010.
4. Cut the Kevlar to the required dimension about 3/8".
5. Insert the two fibers into the respective loose tubes of the fan-out tubing (A side).
6. Crimp the sleeve over the Kevlar using a hex crimp die, size .232", between flats (cavity A of Molex FDDI crimp tool, Order No. 86730-5000). Then crimp the outer jacket on the back of the crimp sleeve using a hex crimp die, size .210", between flats (cavity B).



7. Bring the bend relief boot over the crimp sleeve. Enclose the assembly into the two housing halves.

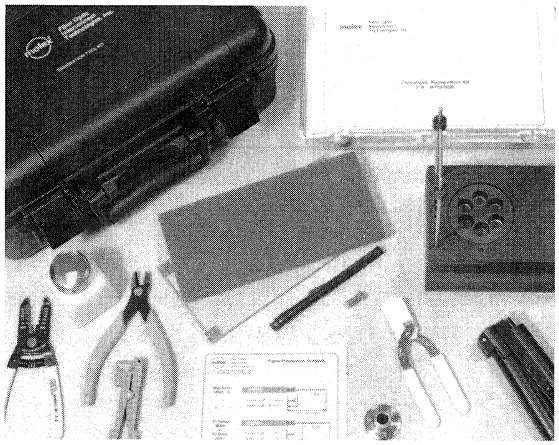


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Termination Tool Kits

Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

Termination Tool Kits for Series
86710 - ST*
86713 - ST II*
86720 - SMA
86750 - FC
86757 - FC II
86760 - SC



- ☐ Field termination tool kit
- ☐ Improved yield
- ☐ Fast termination time
- ☐ Minimal training requirement

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Description

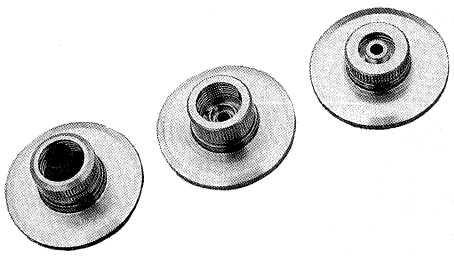
The Molex universal termination tool kit provides all the tools necessary to terminate a variety of industry standard fiber optic connectors produced by Molex. These industry standards include the ST, ST II, SMA, FC/PC, FC II and SC connectors.

Each termination kit is packaged in a compact durable carrying case and contains enough consumables to terminate approximately 50 connectors. The tools have been specifically designed to provide repeatable results with minimal operator training, regardless of the environment in which the termination work is being done. The result is a lower total installed cost due to quicker termination time with a substantially improved production yield.

Applications

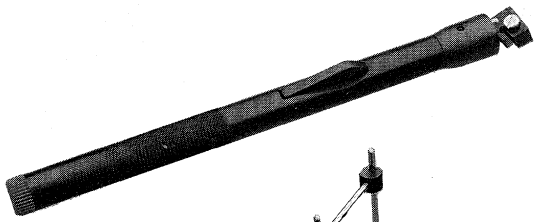
☐ Constant Pressure Polishing Tool

The polish fixture is spring loaded and is designed to provide a constant downward pressure onto the ferrule, independent of the downward pressure applied by the operator. The result is a consistent, repeatable PC (physical contact) polish.



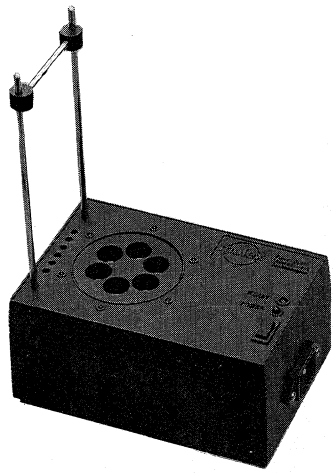
☐ Cleave Tool

The Molex fiber cleave tool is designed to repeatedly and accurately cleave the fiber at a controlled length just above the surface of the ferrule. This eliminates the need for a bead of epoxy and extensive operator training. The result is a substantial reduction in polishing time, and a significant improvement in production yield.



☐ Curing Oven

The Molex curing oven is designed to maximize operator output by eliminating the need for batch curing. It has six independently controlled cavities, and a curing cycle of five minutes. Each cavity senses when a connector is placed in it and automatically times out. Upon completion of a cycle, a buzzer and a red LED will automatically indicate which connector has cured.



*ST and ST II are registered trademarks of AT&T

Termination Tool Kits

molex®
Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

Termination Tool Kits for Series
86710 - ST*
86713 - ST II*
86720 - SMA
86750 - FC
86757 - FC II
86760 - SC

Ordering Information

Order Number	Description
86710-0000	ST termination tooling, 110V/60Hz curing oven
86711-0000	ST termination tooling, 220V/50Hz curing oven
86710-1000	ST polishing disk
86710-2000	ST cleaving tool
86710-3000	ST assembly tool
86710-3010	ST boot assembly tool
86710-5200	ST, SMA, FC crimp tool (Series 860X0-X2XX)
86710-4000	ST, SMA, FC 110V/60Hz curing oven
86711-4000	ST, SMA, FC 220V/50Hz curing oven
86713-0000	STII termination tooling, 110V/60Hz curing oven
86714-0000	STII termination tooling, 220V/50Hz curing oven
86713-0010	STII add-on tool kit
86713-3010	STII cable insertion tool
86713-3020	STII cable splitting tool
86713-5200	STII crimp tool
86713-5201/2	STII crimp dies (both part numbers must be ordered)
86720-0000	SMA termination tooling, 110V/60Hz curing oven
86721-0000	SMA termination tooling, 220V/50Hz curing oven
86720-1000	SMA polishing disk
86720-2000	SMA cleaving tool
86720-3000	SMA assembly tool
86720-3010	SMA boot assembly tool
86710-5200	ST, SMA, FC crimp tool (Series 860X0-X2XX)
86750-0000	FC, termination tooling, 110V/60Hz curing oven
86751-0000	FC, termination tooling, 220V/50Hz curing oven
86750-1000	FC polishing disk
86750-2000	FC/SC cleaving tool
86750-3000	FC assembly tool
86750-3010	FC boot assembly tool
86710-5200	ST, SMA, FC, crimp tool (Series 860X0-X2XX)
86757-0000	FCII, termination tooling, 110V/60Hz curing oven
86757E0000	FCII, termination tooling, 220V/50Hz curing oven
86757-5000	FCII crimp tool w/dies
86757-5001/2	FCII crimp dies (Both 5001 & 5002 required)
86757-3010	FCII connector assembly tool
86757-3020	FCII curing fixture
86757-3000	FCII cable insert tool
86757-0001	FCII cable prep template
86760-0000	SC termination tooling, 110V/60Hz curing oven
86761-0000	SC termination tooling, 220V/50Hz curing oven
86760-1000	SC polishing disk
86750-2000	SC/FC cleaving tool
86760-3020	SC curing fixture
86760-3010	SC cable insert tool
86760-3000	SC body assembly tool
86760-5000	SC crimp tool
86760-5001/2	SC crimp dies
86710-5000	Consumable replacement kit
86710-4011	Protection tube for curing oven

* ST and ST II are registered trademarks of AT&T

Contents of Each Kit

Description	Qty.
Polishing tool	1
Cleaving tool	1
Retaining nut fixture	1
Curing oven & fixtures	1
Stripping template	1
Stripper, No Niks (.010)	1
Stripper, buffer tube	1
Jacket stripper	1
Cutter, Kevlar & cable	1
Dispenser bottle (4 oz.)	1
Polishing plates	3
Microscope, 100X	1
Consumables Kit - Syringe, 3 cc (10) - Epoxy (10 pack) - Loctite 411 (1 tube) - Lapping film, 5µm, 10 sheet pack - Lapping film, 1µm, 25 sheet pack - Lapping film, .5µm, 25 sheet pack	1
Connector assembly procedure	1

Termination Tool Kits for FDDI and ESCON* Connectors

molex®
Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

86730/86740 Series

- ☐ Field termination tool kit
- ☐ Fast termination time
- ☐ Improved yield
- ☐ Minimal training requirement



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Description

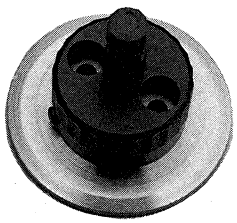
These Molex termination tool kits provide all the tools necessary to terminate Molex 86030 Series FDDI and 86040 Series ESCON compatible connectors.

Each termination kit is packed in a compact durable case and contains enough consumables to terminate approximately 200 connectors. The tools have been specially designed to provide repeatable results with minimal operator training, regardless of the environment in which the termination work is being done. The result is a lower installed cost due to a quicker termination time with a substantially improved production yield.

Applications

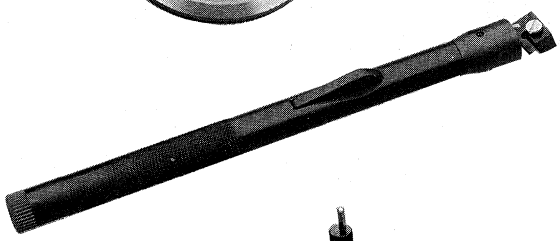
☐ Constant Pressure Polishing Tool

The FDDI polishing tool will polish both contacts simultaneously to ensure uniform performance. It is a spring loaded design which applies a constant downward pressure onto the contacts, independent of the downward pressure applied by the operator. The result is a consistent, repeatable PC (physical contact) polish.



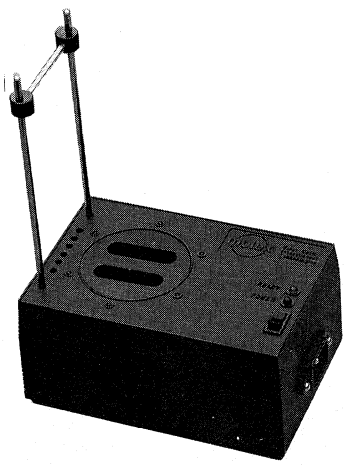
☐ Cleave Tool

The Molex fiber cleave tool is designed to repeatedly and accurately cleave the fiber at a controlled length just above the surface of the ferrule. This eliminates the need for a bead of epoxy and extensive operator training. The result is a substantial reduction in polishing time, and a significant improvement in production yield.



☐ Curing Oven

The Molex curing oven is designed to maximize operator output by eliminating the need for batch curing. It has two independently controlled cavities, and a curing cycle of five minutes. Each cavity senses when a contact pair is placed in it, and automatically times out. Upon completion of a cycle, a buzzer and a red LED will automatically indicate which contact pair has cured.



*ESCON is a registered trademark of IBM Corporation.

Termination Tool Kits for FDDI and ESCON* Connectors

molex®
Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

86730/86740 Series

Ordering Information

Order Number	Description
86730-0000	FDDI termination tool kit, with 110V/60Hz curing oven
86731-0000	FDDI termination tool kit, with 220V/50Hz curing oven
86740-0000	ESCON termination tool kit, with 100V/60Hz curing oven
86741-0000	ESCON termination tool kit, with 220V/50Hz curing oven
86730-4000	FDDI and ESCON 110V/60Hz curing oven
86731-4000	FDDI and ESCON 220V/50Hz curing oven
86710-2000	Cleaving tool
86730-1000	FDDI and ESCON polishing tool
86730-3000	FDDI curing/assembly fixture
86740-3000	ESCON curing/assembly fixture
86730-3010	FDDI and ESCON assembly tool - cable insert
86730-5000	FDDI and ESCON crimp tool, round cable
86730-5010	FDDI and ESCON crimp tool, zipcord cable
86710-5000	Consumable replacement kit
86710-4011	Ferrule protection tubes
86710-0006	Stripping template

Contents of Each Kit

Description	Qty.
Polishing tool	1
Cleaving tool	1
Curing/assembly fixture	2
Curing oven	1
Protection tubes	6
Crimp tool & dies	1
Stripping template	1
Stripper, buffer tube, No Nik	1
Stripper, hard jacket	1
Stripper, soft jacket	1
Cutter, Kevlar & cable	1
Dispenser bottle (4 oz.)	1
Polishing plates	2
Microscope, 100X	1
Consumables Kit - Syringe, 3cc (10) - Epoxy (10 pack) - Loctite 411 (1 tube) - Lapping Film, 5µm, 10 sheet pack - Lapping Film, 1µm, 25 sheet pack - Lapping Film, .5µm, 25 sheet pack	1
Connector assembly procedure	1

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*ESCON is a registered trademark of IBM Corporation.

Super PC Polishing Machine & Accessory Kit

molex®
Fiber Optic Interconnect Technologies, Inc.™
708-803-3600

8671X-6000 Series

- Portable automated polishing machine
- 12 position universal connector mounting plate
- Automated polishing using pre-radiused ferrules
- Polishing pressure controlled automatically
- Adjustable polishing time
- Patented air cushion polishing
- Patented polishing pattern
- High performance polishing process
  Low insertion loss 0.2 dB single mode
  Low return loss (single mode)
  -45 dB min. Super PC
- Multimode and single mode applications



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Description

The new 8671X-6100 Series fiber optic polishing kit includes a fully automated polishing machine allowing high performance polishing to be accomplished in the field or in a factory environment. The machine polishes 12 connectors simultaneously and can be used in both multimode and single mode applications.

Push-pull mounting sleeves allow ST* and FC connector types as well as SC and FDDI ferrules to be mounted on the universal 12 position mounting plate in a few seconds. Each connector is independently spring-loaded, and the polishing pressure is gradually applied and controlled automatically. A high quality end face finish is obtained repeatedly, and is independent of operator skill. Total polishing cycle is about 6 minutes for regular PC finish, and an additional 2.5 minutes is required for super PC polishing.

Applications

- Fiber polishing with flat ferrule
- Fiber polishing with pre-radiused ferrule

Contents of The Polishing Kit	Quantity
Polishing machine	1
Universal mounting plate	1
Contact positioning fixture	1
Polishing cassette with air cushion	2
Polishing cassette (flat with rubber lining)	2
Polishing cassette (flat)	1
Cleaving tool	1
Curing oven	1
Protective tubing	6
Power cords	2
Connector removal tool	1
Lapping film No. 1 (50 sheet pack)	1
Lapping film No. 2 (50 sheet pack)	1
Lapping film No. 3 (50 sheet pack)	1
Lapping film No. 4 (15 sheet pack)	1
Lapping film No. 5 (50 sheet pack)	1
Epoxy pack	10
Syringe	10
Cleansing Tissue (pack)	2
Alcohol bottle	1
Cable preparation template	1
No-Nik Stripper	1
Kevlar cutter	1
Jacket stripper 1	1
Jacket stripper 2	1
Cleaning brush (mounting bushing)	1
Transport case	1
Operating manual	1
Videotape	1

*ST is a registered trademark of AT&T

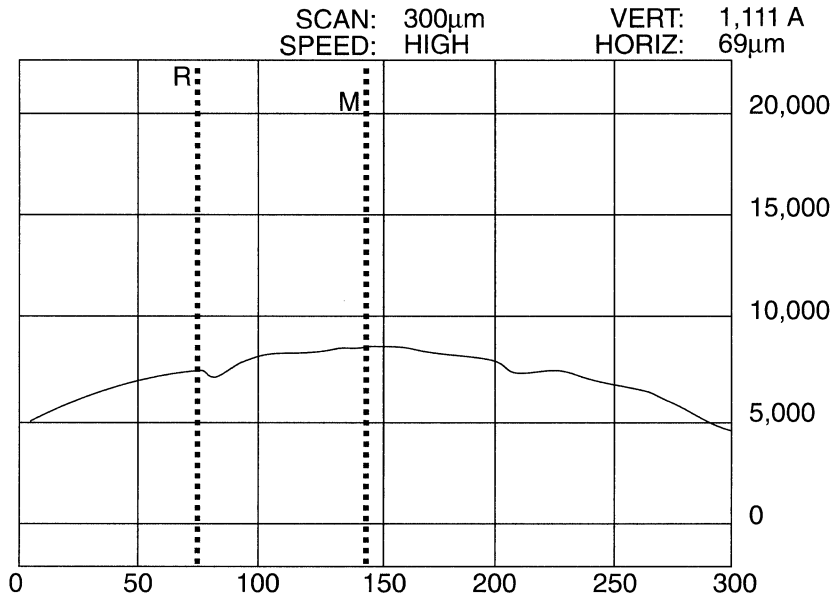
Super PC Polishing Machine & Accessory Kit

Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

8671X-6000 Series

Polishing Profile Characteristics

Typical fiber / end face profile measured with a high precision profilometer



Typical Characteristics:

Insertion loss
X = 0.1 dB, σ = 0.05 dB

Return loss
X = - 48 dB, σ = 1.5 dB

Radius
Pre-radiused ferrule
20mm, +/- 10mm

Fiber protrusion
-0.05 µm, +0.5 µm

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Ordering Information

Order Number	Description
86710-6000	Complete polishing machine kit, 110V/60 Hz
86711-6000	Complete polishing machine kit, 220V/50 Hz
86710-6101	Lapping film No. 1 (50 sheet pack)
86710-6102	Lapping film No. 2 (50 sheet pack)
86710-6103	Lapping film No. 3 (50 sheet pack)
86710-6104	Lapping film No. 4 (15 sheet pack)
86710-6108	Lapping film No. 5 (50 sheet pack)

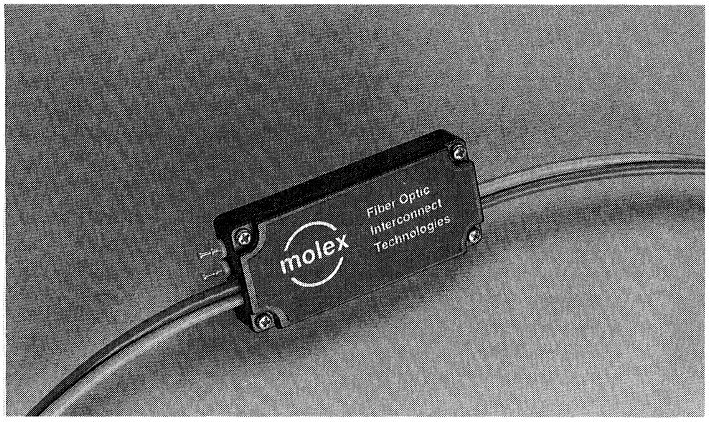
Specifications subject to change

Fiber Optic Bypass Switch

Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

865XX-1100 Series

- Low insertion loss, 0.45dB typical
- High repeatability, 0.05 dB maximum
- Meets all FDDI standard requirements
- High environmental stability
- 50/125 μm and 62.5/125 μm fiber versions available
- Compact housing
- Operates independently of wavelength, signal format and transmission rate



H

Description

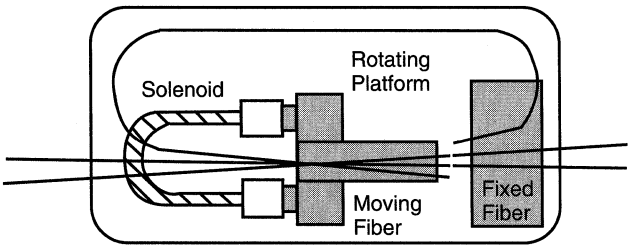
The 865XX-1100 Series fiber optic bypass switch is a low loss, high stability optical switch used in FDDI networks to connect single attachment stations or, when used as a pair, to bypass both the primary and secondary rings of a dual attachment station or concentrator.

The switches are compact and environmentally stable. All switches are shipped with color-coded cable assemblies, an installation diagram, and individual test reports.

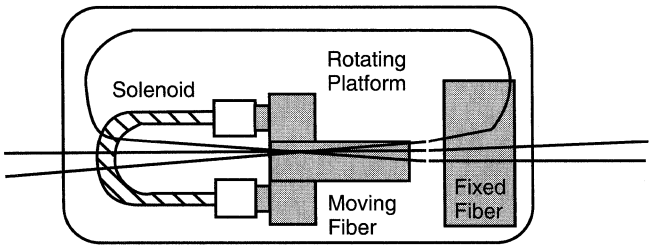
Applications

- FDDI station bypassing
- FDDI single attachment station connection
- FDDI dual attachment station bypassing
- FDDI connector bypassing
- FDDI protection switching

Functional Diagram



Inserted State (Power on)



Bypass State (Power off)

Fiber Optic Bypass Switch

molex® Fiber Optic Interconnect Technologies, Inc.™
708-803-3600

865XX-1100 Series

Specifications

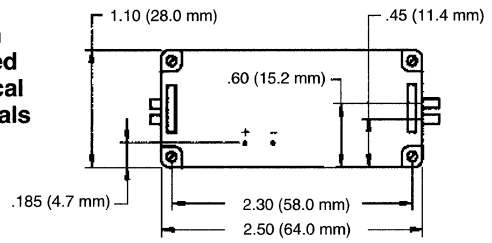
Characteristics	Units	Value	Comments
Insertion Loss	dB	0.45	Typical, including connectors
	dB	1.0	Maximum, including connectors
	dB	3-6	Loopback insertion loss
Repeatability	dB	0.05	Maximum
Cross-Talk	dB	-60	Maximum
Switching Time	msec.	22	Maximum
Durability	cycles	10,000,000	Minimum
Switching Voltage	VDC	4.3	Minimum, 6.0 VDC maximum
Switching Current	mA	110	@ 5.0 VDC (30 mA to hold)
Coil Resistance	ohm	44	Minimum, 48 Ohm maximum
Coil Inductance	mH	28	Minimum, 32mH maximum
Operating Temperature	°C	-10 to +60	
Storage Temperature	°C	-25 to +65	

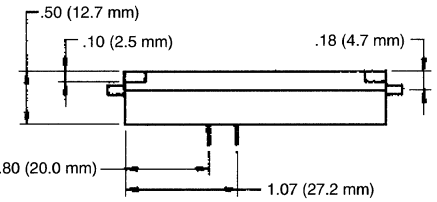
Specifications subject to change

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Mechanical Dimensions

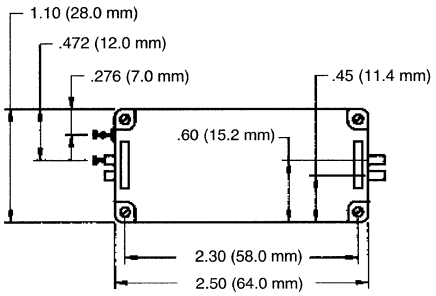
Bottom Mounted Electrical Terminals

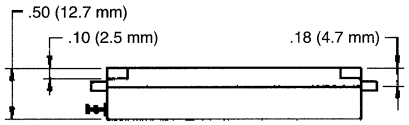




Units:
Inch (mm)

Side Mounted Electrical Terminals





Lead Length: 1 meter minimum

(0.6mm O.D. gold plated pins)

Ordering Information (Other fiber size and connector termination styles available upon request)

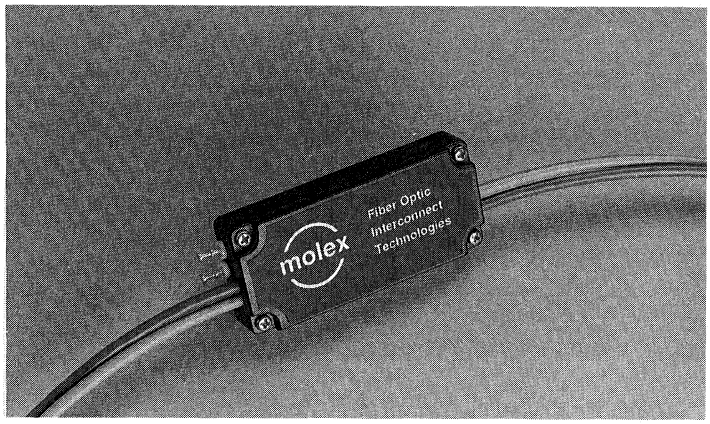
Order Number	Description
86514-1100	Fiber optic bypass switch, 62.5/125 µm fiber, ST connectors, bottom mounted electrical terminals
86524-1100	Fiber optic bypass switch, 62.5/125 µm fiber, FC connectors, bottom mounted electrical terminals
86504-1100	Fiber optic bypass switch, 62.5/125 µm fiber, no connector, bottom mounted electrical terminals
86515-1100	Fiber optic bypass switch, 62.5/125 µm fiber, ST connectors, side mounted solder wrap lugs
86525-1100	Fiber optic bypass switch, 62.5/125 µm fiber, FC connectors, side mounted solder wrap lugs
86505-1100	Fiber optic bypass switch, 62.5/125 µm fiber, no connector, side mounted solder wrap lugs

Fiber Optic Single Mode Switch

molex® Fiber Optic Interconnect Technologies, Inc.™
708-803-3600

86500-X2 Series

- Low insertion loss, 0.45 dB typical
- High repeatability, 0.01 dB maximum
- High environmental stability
- -30 dB & -50 dB return loss versions available
- Compact housing
- High channel isolation, 60 dB minimum
- On-Off and 1X2 versions available



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Description

The 86500 Series single mode fiber optic switch is a low loss, high stability optical switch used in single mode applications.

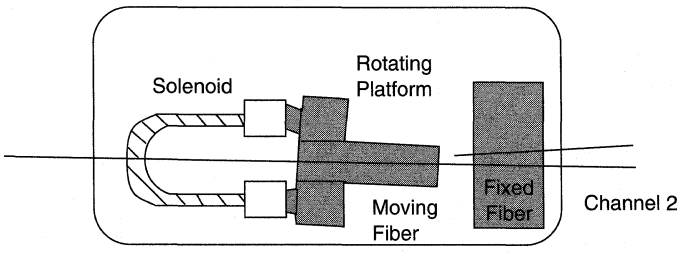
Switches are compact and environmentally stable. All switches are shipped with individual test reports.

Both On-Off and 1X2 versions are available. The On-Off switch version is used to interrupt an optical signal and isolate sources and receivers in test equipment and high security networks. 1X2 switches are 2 output devices allowing channel selection for various switching applications.

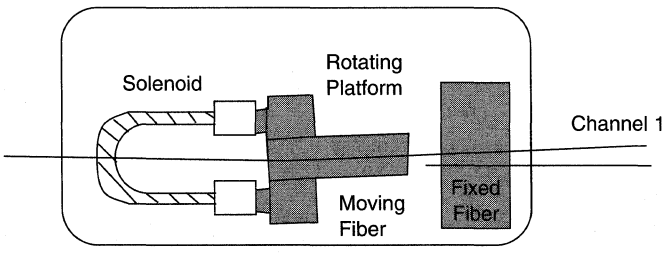
Applications

- Test Equipment
- On-Off switches for signal interruption
- 1X2 switch for channel selection
- Fiber channel protection

Functional Diagram



Channel 2 "On"
(Power on)



Channel 1 "On"
(Power off)

Fiber Optic Single Mode Switch

molex® Fiber Optic Interconnect Technologies, Inc.™
708-803-3600

86500-X2 Series

Specifications

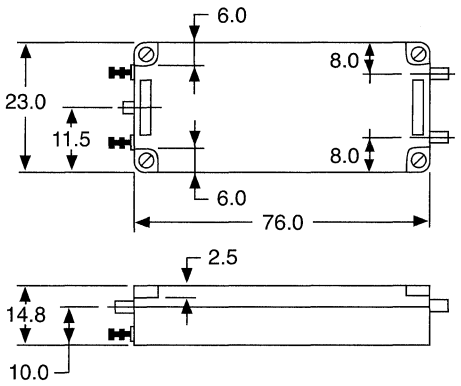
Characteristics	Units	Value	Comments
Insertion Loss	dB	0.45	Typ., w/o connector, -30 dB RL
	dB	1.20	Typ., w/o connector, -55 dB RL
Back Reflection	dB	-30 / -55	Max., std. & high performance
Repeatability	dB	0.01	Maximum
Cross-Talk	dB	-60	Maximum
Switching Time	msec.	20 / 25	Maximum (latching / non-latching)
Durability	cycles	10,000,000	Minimum
Switching Voltage	VDC	4.3	Minimum, 6.0 VDC maximum
Switching Current	mA	120	@ 5.0 VDC (30 mA to hold)
Coil Resistance	ohm	40	Minimum, 44 Ohm maximum
Coil Inductance	mH	32	Minimum, 36mH maximum
Operating Temperature	Deg. C	0 to +55	
Storage Temperature	Deg. C	-25 C to +65	

Specifications subject to change

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Mechanical Dimensions

Side Mounted Solder Wrap Lugs



Lead Length: 1 meter minimum

Units: mm

Ordering Information

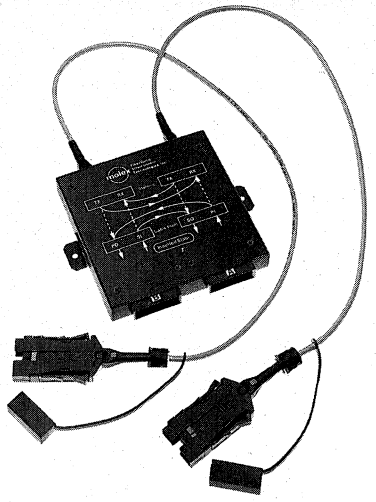
Order Number	Description
86501-1300	Single mode fiber optic switch, no connector, On-Off latching type, -30dB back reflection
86501-2300	Single mode fiber optic switch, no connector, On-Off latching type, -55dB back reflection
86502-1300	Single mode fiber optic switch, no connector, On-Off non-latching type, -30dB back reflection
86502-2300	Single mode fiber optic switch, no connector, On-Off non-latching type, -55dB back reflection
86503-1300	Single mode fiber optic switch, no connector, 1X2 latching type, -30dB back reflection
86503-2300	Single mode fiber optic switch, no connector, 1X2 latching type, -55dB back reflection
86504-1300	Single mode fiber optic switch, no connector, 1X2 non-latching type, -30dB back reflection
86504-2300	Single mode fiber optic switch, no connector, 1X2 non-latching type, -55dB back reflection

FDDI Dual Fiber Optic Bypass Switch

molex®
Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

865XX-1200 Series

- Integrated housing for dual attachment station and concentrator bypassing
- Low insertion loss, 1.2 dB typical
- High repeatability, 0.05 dB maximum
- Meets all FDDI standard requirements
- High environmental stability
- 50/125 µm and 62.5/125 µm fiber versions available
- LED for inserted state



H

Description

The 865XX-1200 Series FDDI dual fiber optic bypass switch is a low loss, high stability optical switch used to bypass both the primary and secondary rings of a dual attachment station or concentrator in an FDDI network.

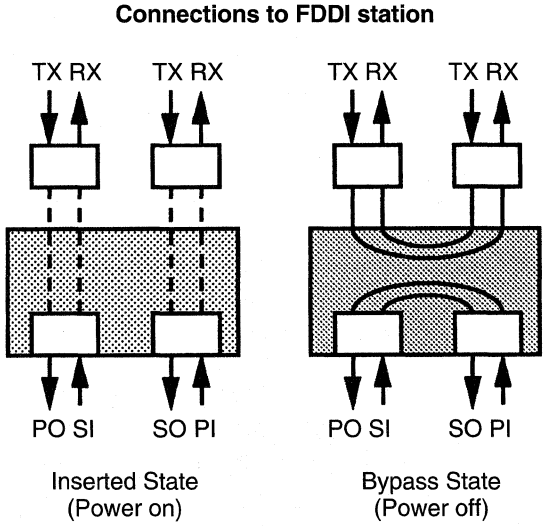
When an FDDI node is active (Power On), the FDDI dual bypass switch operates in an "inserted state", transparent to both the FDDI station and the ring. Should a dual attachment station or concentrator fail (Power Off), the FDDI dual fiber optic bypass switch will operate in a "bypass state", allowing the optical signal to optically bypass the failed FDDI station. A green LED on the front panel indicates when the switch is in the inserted state.

The FDDI dual fiber optic bypass switch integrates two fully reversible fiber optic bypass switches in a rugged package. The unit can be incorporated as part of the cable plant, allowing the FDDI station to be disconnected without interrupting the FDDI ring network.

Applications

- FDDI Dual Attachment Station (DAS) bypassing
- FDDI concentrator bypassing
- FDDI protection switching

Functional Diagram



FDDI Dual Fiber Optic Bypass Switch

molex® Fiber Optic Interconnect Technologies, Inc.™
708-803-3600

865XX-1200 Series

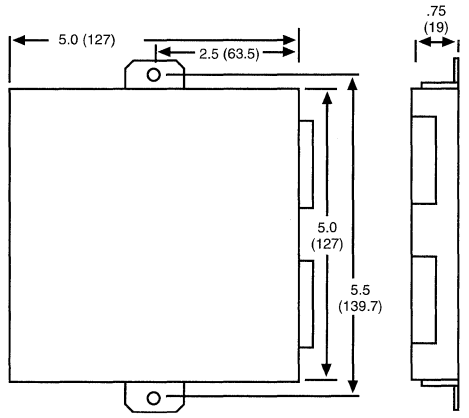
Specifications

Characteristics	Units	Value	Comments
Insertion Loss	dB	1.2	Typical, including connectors
	dB	2.0	Maximum, including connectors
Repeatability	dB	0.05	Maximum
Cross-Talk	dB	-60	Maximum
Switching Time	msec.	22	Maximum
Durability	cycles	10,000,000	Minimum
Switching Voltage	VDC	4.3	Minimum, 6.0 VDC maximum
Switching Current	mA	(x2) 110	@ 5.0 VDC (x2) (2x 30 mA to Hold)
Coil Resistance	ohm	44	Minimum, 48 Ohm maximum
Coil Inductance	mH	28	Minimum, 32mH maximum
Operating Temperature	°C	-10 to +60	
Storage Temperature	°C	-25 to +65	

Specifications subject to change

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Mechanical Dimensions



Unit: mm

Lead Length: 5 feet

Ordering Information (Other fiber size and connector termination styles available upon request)

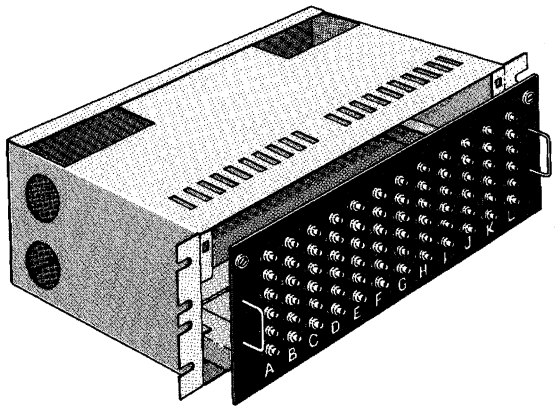
Order Number	Description
86542-1200	FDDI dual bypass switch, 62.5/125 µm fiber, FDDI connectors, modular plug electrical interface
86512-1200	FDDI dual bypass switch, 62.5/125 µm fiber, ST connectors, modular plug electrical interface
86541-1200	FDDI dual bypass switch, 62.5/125 µm fiber, FDDI connectors, IDT female conector
86511-1200	FDDI dual bypass switch, 62.5/125 µm fiber, ST connectors, IDT female connector
86540-1200	FDDI dual bypass switch, 62.5/125 µm fiber, FDDI connectors, circular DIN electrical interface
86510-1200	FDDI dual bypass switch, 62.5/125 µm fiber, ST connectors, circular DIN electrical interface

Rack Mount Patch Panel

molex®
Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

86851 Series

- Accepts all connector styles
- Room for 48 or 72 terminations
- Modular stackable design
- Slide out patch panel for easy assembly
- Front and rear access



H

Description

The 86851 Series rack mounted patch panels are used in an enclosed rack or data cabinet for direct termination of break-out style cables. They are available in 48 or 72 fiber capacities. The panel slides out for easy fiber assembly and accepts all connector styles. A cable tray is provided for spare cable storage. Labels are provided for jumper routing documentation. These panels have both front and rear access. The modular design is stackable for expansion.

Applications

These rack mounted patch panels are used for direct termination of break-out style cables and provide sub-unit organization while the data cabinet or rack provides security. They are available in either 48 or 72 fiber capacities.

Typical applications are at the MDF or IDF as a demarcation point between central and distributed computer equipment. The patch panels are easily stacked together to provide system expansion and inter-jumper routing.

Rack Mount Patch Panel

molex® Fiber Optic Interconnect Technologies, Inc.™
708-803-3600

86851 Series

Specifications

Characteristics	
Dimensions:	L W D 48 ports 10" X 17" X 5.25" 72 ports 10" X 17" X 7.5"
Shipping Weight:	48 ports = 12 lbs. 72 ports = 17 lbs.
Materials:	18 gauge C.R.S.
Finish:	Polyurethane enamel, light grey, medium texture

Specifications subject to change

H

Ordering Information

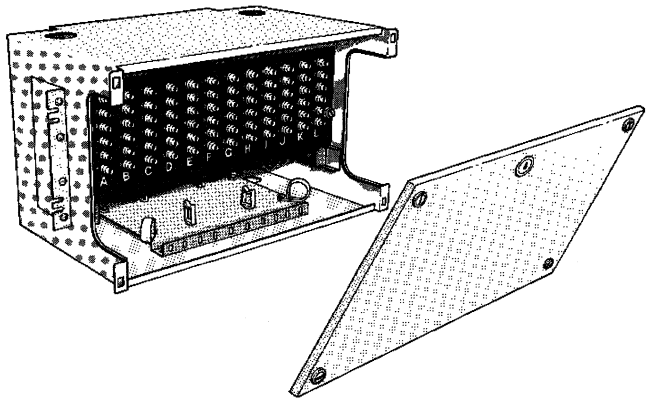
Order Number	Description
86851-1400	Rack mount patch panel, 48 ports, ST adapters
86851-1500	Rack mount patch panel, 72 ports, ST adapters
86851-5400	Rack mount patch panel, 48 ports, FC adapters
86851-5500	Rack mount patch panel, 72 ports, FC adapters
86851-6400	Rack mount patch panel, 48 ports, SC adapters
86851-6500	Rack mount patch panel, 72 ports, SC adapters
86851-3400	Rack mount patch panel, 24 ports, FDDI adapters
86851-3500	Rack mount patch panel, 36 ports, FDDI adapters
86851-2400	Rack mount patch panel, 48 ports, SMA adapters
86851-2500	Rack mount patch panel, 72 ports, SMA adapters

Rack Mount Splice & Termination Cabinet

molex®
Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

86861/86862 Series

- Accepts up to 24, 48 or 72 terminations
- Accepts all connector styles
- Accommodates 2, 4 or 6 splice trays
- Modular stackable design
- Hinged, slide out patch panel for easy access
- Front and rear access
- Key lock security option



H

Description

The 86861/86862 Series rack mounted patch panels are used for splicing of pigtails on loose tube or direct termination of break-out style cables. Available in capacities of 24 or 72 splice connections or terminations, and accept all connector styles. The patch panel slides out for easy access. Cable access is from both front and rear. Splice trays are also mounted on a slider for easy access. Labels are provided for jumper routing and documentation. These cabinets are of modular, stackable design with an enclosed front for security. Front is available with optional key lock.

Applications

These rack mounted fiber optic patch panels are used in inter-building applications for splicing of pigtails on loose tube cables or for direct termination of break-out style cables. A typical application might be in the MDF or IDF as a demarcation point between central and distributed computer equipment.

Rack Mount Splice & Termination Cabinet

molex® Fiber Optic Interconnect Technologies, Inc.™
708-803-3600

86861/86862 Series

Specifications

Characteristics						
Dimensions:		L		W		D
	24 ports & 48 ports	12"	X	17"	X	7"
	72 ports	12"	X	17"	X	10.5"
Shipping Weight:	24 ports & 48 ports = 17 lbs. 72 ports = 25 lbs.					
Materials:	18 gauge C.R.S.					
Finish:	Polyurethane enamel, light grey, medium texture					

Specifications subject to change

Ordering Information

Order Number	Description
86861-120X	Rack mount splice & termination cabinet, 24 ports, ST adapters, direct termination
86861-140X	Rack mount splice & termination cabinet, 48 ports, ST adapters, direct termination
86861-150X	Rack mount splice & termination cabinet, 72 ports, ST adapters, direct termination
86861-220X	Rack mount splice & termination cabinet, 24 ports, SMA adapters, direct termination
86861-240X	Rack mount splice & termination cabinet, 48 ports, SMA adapters, direct termination
86861-250X	Rack mount splice & termination cabinet, 72 ports, SMA adapters, direct termination
86861-520X	Rack mount splice & termination cabinet, 24 ports, FC adapters, direct termination
86861-540X	Rack mount splice & termination cabinet, 48 ports, FC adapters, direct termination
86861-550X	Rack mount splice & termination cabinet, 72 ports, FC adapters, direct termination
86861-620X	Rack mount splice & termination cabinet, 24 ports, SC adapters, direct termination
86861-640X	Rack mount splice & termination cabinet, 48 ports, SC adapters, direct termination
86861-650X	Rack mount splice & termination cabinet, 72 ports, SC adapters, direct termination
86861-320X	Rack mount splice & termination cabinet, 12 ports, FDDI adapters, direct termination
86861-340X	Rack mount splice & termination cabinet, 24 ports, FDDI adapters, direct termination
86861-350X	Rack mount splice & termination cabinet, 36 ports, FDDI adapters, direct termination
86862-121X	Rack mount splice & termination cabinet, 24 ports, ST adapters, splice tray slider accommodates up to 2 splice trays*
86862-142X	Rack mount splice & termination cabinet, 48 ports, ST adapters, splice tray slider accommodates up to 4 splice trays*
86862-153X	Rack mount splice & termination cabinet, 72 ports, ST adapters, splice tray slider accommodates up to 6 splice trays*
86862-221X	Rack mount splice & termination cabinet, 24 ports, SMA adapters, splice tray slider accommodates up to 2 splice trays*
86862-242X	Rack mount splice & termination cabinet, 48 ports, SMA adapters, splice tray slider accommodates up to 4 splice trays*
86862-253X	Rack mount splice & termination cabinet, 72 ports, SMA adapters, splice tray slider accommodates up to 6 splice trays*
86862-521X	Rack mount splice & termination cabinet, 24 ports, FC adapters, splice tray slider accommodates up to 2 splice trays*
86862-542X	Rack mount splice & termination cabinet, 48 ports, FC adapters, splice tray slider accommodates up to 4 splice trays*
86862-553X	Rack mount splice & termination cabinet, 72 ports, FC adapters, splice tray slider accommodates up to 6 splice trays*
86862-621X	Rack mount splice & termination cabinet, 24 ports, SC adapters, splice tray slider accommodates up to 2 splice trays*
86862-642X	Rack mount splice & termination cabinet, 48 ports, SC adapters, splice tray slider accommodates up to 4 splice trays*
86862-653X	Rack mount splice & termination cabinet, 72 ports, SC adapters, splice tray slider accommodates up to 6 splice trays*
86862-321X	Rack mount splice & termination cabinet, 12 ports, FDDI adapters, splice tray slider accommodates up to 2 splice trays*
86862-342X	Rack mount splice & termination cabinet, 24 ports, FDDI adapters, splice tray slider accommodates up to 4 splice trays*
86862-353X	Rack mount splice & termination cabinet, 36 ports, FDDI adapters, splice tray slider accommodates up to 6 splice trays*
	Replace "X" with either a "0" = no lock or "3" = lock option

*Splice trays must be ordered separately

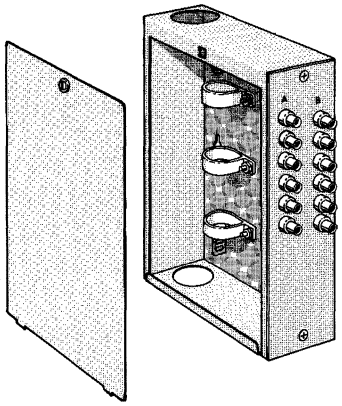
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Wall Mount Termination Units

Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

86821 Series

- 1 - 12 fiber capacity
- Compact size
- Stackable
- Interchangeable patch panels



H

Description

The 86821 Series wall mounted distribution unit allows direct termination of break-out style cables up to 12 fibers. Units may be stacked for increasing fiber counts.

Applications

Wall mounted fiber optic distribution unit used in intra building applications. The FTU provides the customer with an economical, easily expandable patch panel assembly where splicing of cables is not required. Typical applications are the interface between horizontally distributed building or breakout type cables, and the optical equipment. The units are easily expandable by stacking together providing a cross-connect field between central and distributed computer equipment.

Wall Mount Termination Units

molex®
Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

86821 Series

Specifications

Characteristics	
Dimensions:	L W D 3.0" X 6.0" X 10.0"
Shipping Weight:	5 lbs.
Materials:	16 gauge C.R.S.
Finish:	Polyurethane enamel, light grey, medium texture

Specifications subject to change

Ordering Information

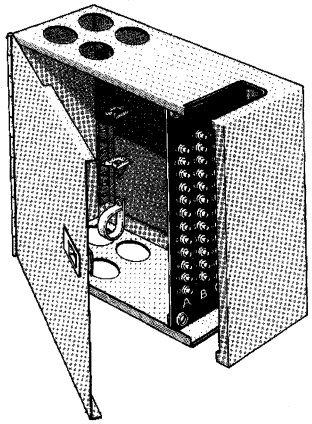
Order Number	Description
86821-1100	Wall mount termination unit, 12 ports, ST adapters
86821-5100	Wall mount termination unit, 12 ports, FC adapters
86821-6100	Wall mount termination unit, 12 ports, SC adapters
86821-3100	Wall mount termination unit, 6 ports, FDDI adapters
86821-2100	Wall mount termination unit, 12 ports, SMA adapters

Wall Mount Splice & Termination Cabinet

molex®
Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

86831/86832 Series

- Accepts up to 24 (or) 48 fibers
- Accepts all connector styles
- Compact low profile
- Secure locking door
- Accepts either splicing or direct termination of fiber optic cable



H

Description

The 86831/86832 Series wall mounted distribution cabinets provide secure enclosed patch panel assemblies for up to either 24 or 48 fibers. When space is at a premium and racks are not available, these cabinets provide cable side-unit organization and closed door security (locks optional). A cable tray is included as standard equipment and splice trays are available for non-breakout style cable designs. Labels are provided for jumper routing. These cabinets are of a compact, low profile design, stackable for expansion. Front access only.

Applications

These wall mounted fiber optic distribution cabinets are used in both inter-building and campus-type applications for direct termination of break-out style cables. Splice trays are available allowing pigtails to be spliced on loose-tube or other non-break-out style cable designs.

Typical applications are interface between an outside plant cable and the optical equipment or any location where rack space is not available. This provides a convenient administrative point between outside plant and central computing or switching equipment.

Wall Mount Splice & Termination Cabinet

molex® Fiber Optic Interconnect Technologies, Inc.™
708-803-3600

86831/86832 Series

Specifications

Characteristics	
Dimensions:	L W D 24 ports 14" X 3.5" X 14" 48 ports 14" X 5.5" X 14"
Shipping Weight:	24 ports = 15 lbs. 48 ports = 25 lbs.
Materials:	16 gauge C.R.S.
Finish:	Polyurethane enamel, light grey, medium texture

Specifications subject to change

Ordering Information

Order Number	Description
86831-120X	Wall mount splice & termination cabinet, 24 ports, ST adapters, direct termination
86831-520X	Wall mount splice & termination cabinet, 24 ports, FC adapters, direct termination
86831-220X	Wall mount splice & termination cabinet, 24 ports, SMA adapters, direct termination
86831-620X	Wall mount splice & termination cabinet, 24 ports, SC adapters, direct termination
86831-320X	Wall mount splice & termination cabinet, 12 ports, FDDI adapters, direct termination
86831-140X	Wall mount splice & termination cabinet, 48 ports, ST adapters, direct termination
86831-540X	Wall mount splice & termination cabinet, 48 ports, FC adapters, direct termination
86831-240X	Wall mount splice & termination cabinet, 48 ports, SMA adapters, direct termination
86831-640X	Wall mount splice & termination cabinet, 48 ports, SC adapters, direct termination
86831-340X	Wall mount splice & termination cabinet, 24 ports, FDDI adapters, direct termination
86832-120X	Wall mount splice & termination cabinet, 24 ports, ST adapters, splice tray termination*
86832-520X	Wall mount splice & termination cabinet, 24 ports, FC adapters, splice tray termination*
86832-220X	Wall mount splice & termination cabinet, 24 ports, SMA adapters, splice tray termination*
86832-620X	Wall mount splice & termination cabinet, 24 ports, SC adapters, splice tray termination*
86832-320X	Wall mount splice & termination cabinet, 12 ports, FDDI adapters, splice tray termination*
86832-140X	Wall mount splice & termination cabinet, 48 ports, ST adapters, splice tray termination*
86832-540X	Wall mount splice & termination cabinet, 48 ports, FC adapters, splice tray termination*
86832-240X	Wall mount splice & termination cabinet, 48 ports, SMA adapters, splice tray termination*
86832-640X	Wall mount splice & termination cabinet, 48 ports, SC adapters, splice tray termination*
86832-340X	Wall mount splice & termination cabinet, 24 ports, FDDI adapters, splice tray termination*
	Replace "X" with either a "0" = no lock or "3" = lock option

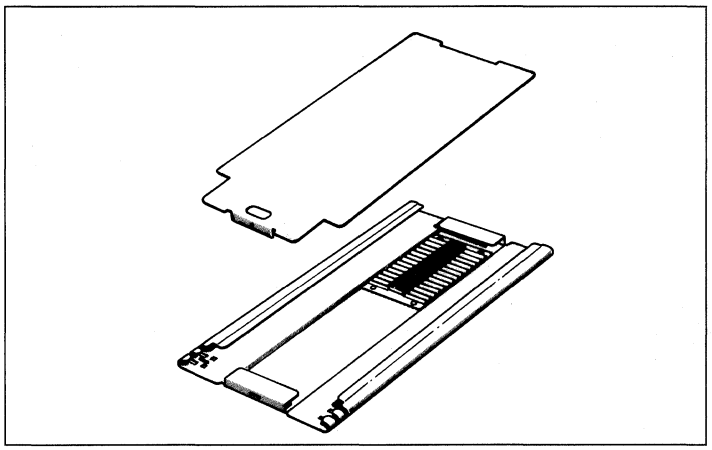
*Splice trays must be ordered separately

Optical Splice Trays

molex®
Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

86810 Series

- Available in two sizes
- Trays provided with snap-on covers
- Provides maximum bend radius for all operating wavelengths
- Accommodates up to 12 fibers per tray
- Interchangeable polymer splice holders
- May be used outdoors in many standard enclosures



H

Description

The 86810 Series fiber optic splice trays are designed to accommodate any type of splice--fusion or mechanical--in any integral polymer holder.* The trays are designed to ensure maximum bend radius for single mode and multi-mode systems at any wavelengths (1300 nm and 1500nm operation). They are available in two sizes, complete with an easy-access snap-on cover which protects the splices. Each tray has a capacity of 12 fibers. The aluminum construction with clear anodized finish makes it suitable for outdoor use in most standard enclosures. These compact splice trays assure high fiber density.

Applications

Use these optical splice trays for all fusion or mechanical splicing of fiber optic cables. They house and provide mechanical protection of the spliced fibers. They can be used in conjunction with either a splice tray organizer or an interconnect cabinet for either indoor or outdoor applications.

*These splice trays are compatible with GTE, 3M, Norland and AMP.

Optical Splice Trays

Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

86810 Series

Specifications

Characteristics	
Dimensions:	L W D 10" X 5" X .360"
Splice Capacity:	12 splices
Materials:	5052 H 32 Aluminum Per Mil-QQ-A-250-8
Finish:	Clear Anodized Per MIL-A-8625 Type II

Specifications subject to change

Ordering Information

Order Number	Description
86810-0101	10" Optical splice tray, mechanical splice
86810-0102	10" Optical splice tray, fusion splice

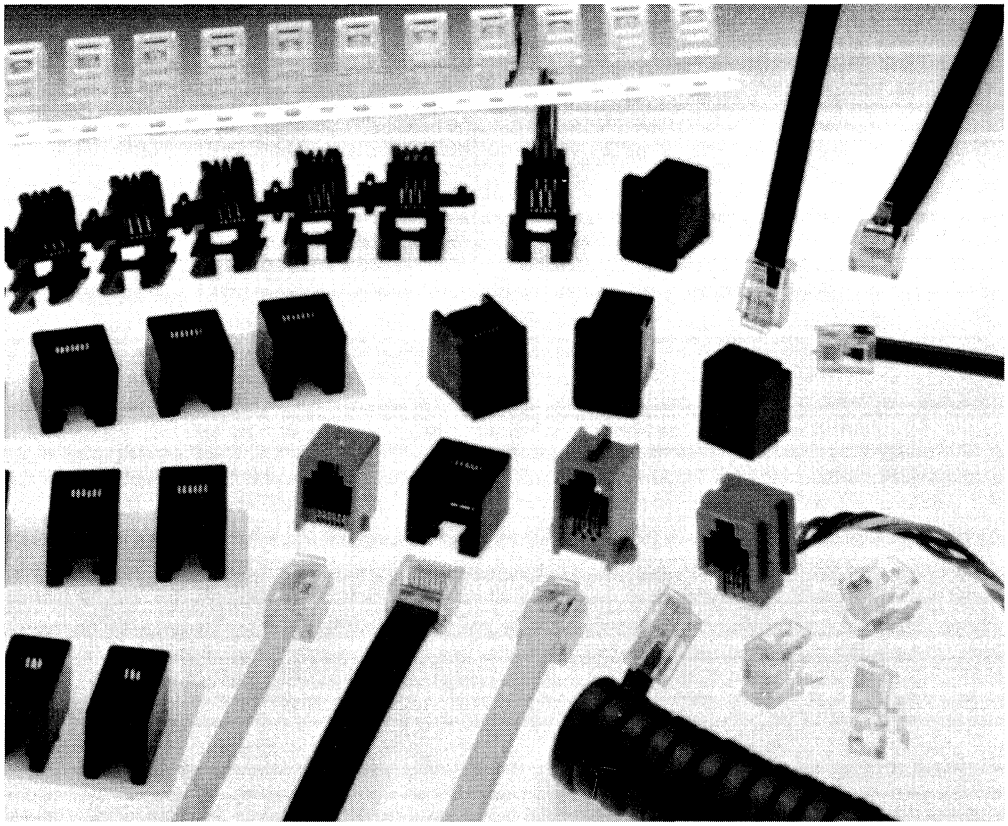
H

Notes

Fiber Optic
Interconnect
Technologies, Inc.™
708-803-3600

Telecom Interconnection Products

Contents



Modular Plugs and Jacks

FCC-68 Type Plugs 2I-3I
Modular PCB Right Angle Jacks 4I-13I
SMT Jacks 14I
Shielded Jacks 15I-16I
Shunt Jacks 17I-18I
Top Entry Jacks 19I-22I
Bottom Entry Jacks 23I
Receptacle Housing/IDT Jacks 24I
Wire Leaded Jacks 25I-31I
Quick Sealed Splice 32I
Vertical Modular Jacks 33I-34I

DIN 41612 Connectors

Introduction 35I-36I
Dual Row, Straight 37I-38I
Dual Row, Right Angle 39I-40I
Triple Row, Straight 41I-42I
Triple Row, Right Angle 43I-44I

FCC-68 Plugs

87031 Series

- Double strain relief construction
- Mates with FCC - 68 style jacks
- Selective plating
- Available in strip mounted and loose piece
- To terminate flat oval telephone cord to REA Bulletin 345-80, PE 75
- UL recognized

Specifications:

Housing: Natural polycarbonate UL 94V-2

Contact Material: Phosphor Bronze

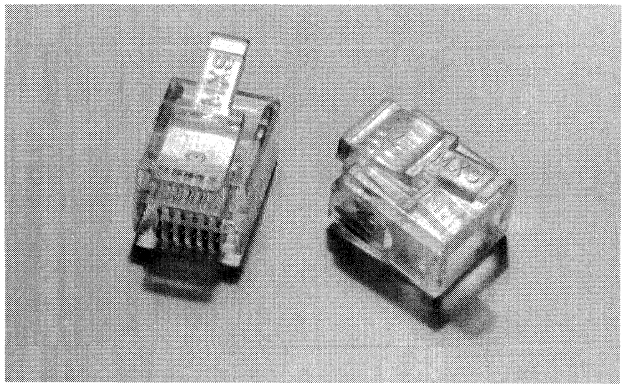
Cable to Plug Tensile Strength: 8.16 kg (18 lbs.) min.

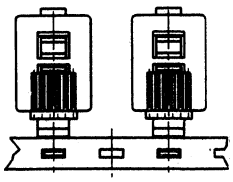
Current Rating: 1.5A max. per circuit

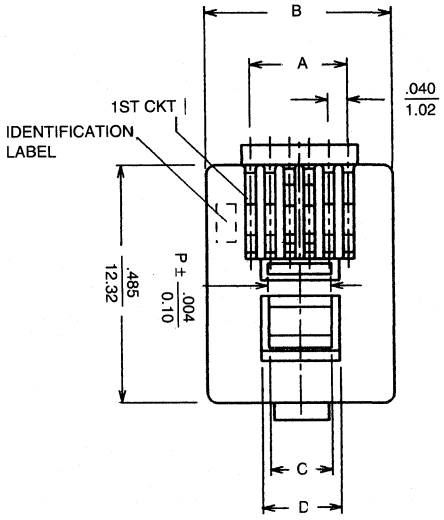
Contact Resistance: 20 milliohms max. at 100 mA max. 50mV max.

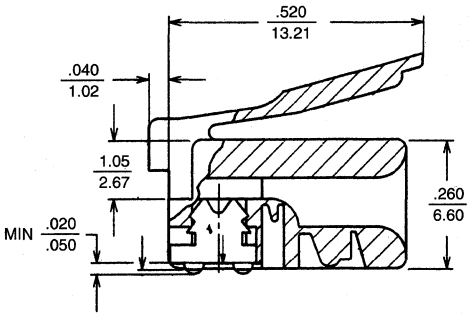
Insulation Resistance: 500 megohms min. at 500V DC

Dielectric Withstanding Voltage: 1000V AC rms









Ordering Information and Dimensions

Circuits	Loaded Contacts	Strip Mounted Order Nos.			Loose Piece Order Nos.			Dim.			
		*Plating No. 1	**Plating No. 2	***Plating No. 3	*Plating No. 1	**Plating No. 2	***Plating No. 3	A	B	C	D
4	4	87031-0412	87031-0422	87031-0432	87031-0413	87031-0423	87031-0433	.120 **3,05**	.300 **7,62**	.181 **4,60**	.205 **5,21**
6	2	87031-0614	87031-0624	87031-0634	87031-0615	87031-0625	87031-0635	.200 **5,08**	.380 **9,65**	.181 **4,60**	.205 **5,21**
6	4	87031-0616	87031-0626	87031-0636	87031-0617	87031-0627	87031-0637	.200 **5,08**	.380 **9,65**	.181 **4,60**	.205 **5,21**
6	6	87031-0618	87031-0628	87031-0638	87031-0619	87031-0629	87031-0639	.200 **5,08**	.380 **9,65**	.181 **4,60**	.275 **6,98**

* Plating No. 1 - .000030 (.00076) min. gold in contact area, .000050 (0.00127) min. tin/lead in pierce area, both over .000050 (0.00127) min. nickel.
** Plating No. 2 - .000050 (0.00127) min. gold in contact area, .000050 (0.00127) min. tin/lead in pierce area, both over .000050 (0.00127) min. nickel.
*** Plating No. 3 - .000015 (0.00038) min. gold in contact area, .000050 (0.00127) min. tin/lead in pierce area, both over .000050 (0.00127) min. nickel.

FCC-68 Plugs

90075 Series

- Mates with W.E. Co. and FCC-68 style jacks
- Pre-assembled contacts
- Selective gold platings
- To terminate flat oval telephone cord to REA Bulletin 345-80, PE 75
- Strip mounting - cost efficiencies - time saving
- 4, 6 & 8 way loaded or partially loaded

Specifications:

Housing: Natural polycarbonate UL 94V-2

Contact Material: Phosphor Bronze

Platings:

Plating 1: 0,76 µm/30 µinch min. gold in contact area, 1,27 µm/50 µinch min. tin/lead in pierce area both over 1,27 µm/50 µinch min. nickel

Plating 2: 1,27 µm/50 µinch min. gold in contact area, 1,27 µm/50 µinch min. tin/lead in pierce area 1,27 µm/50 µinch nickel all over

Cable to Plug Tensile Strength: 7.71 kg (17 lbs) min.

Voltage Rating: > 125V DC

Current Rating: 1.5A max. per circuit

Contact Resistance: 20 milliohms max. at 100 mA max. 50 mV max.

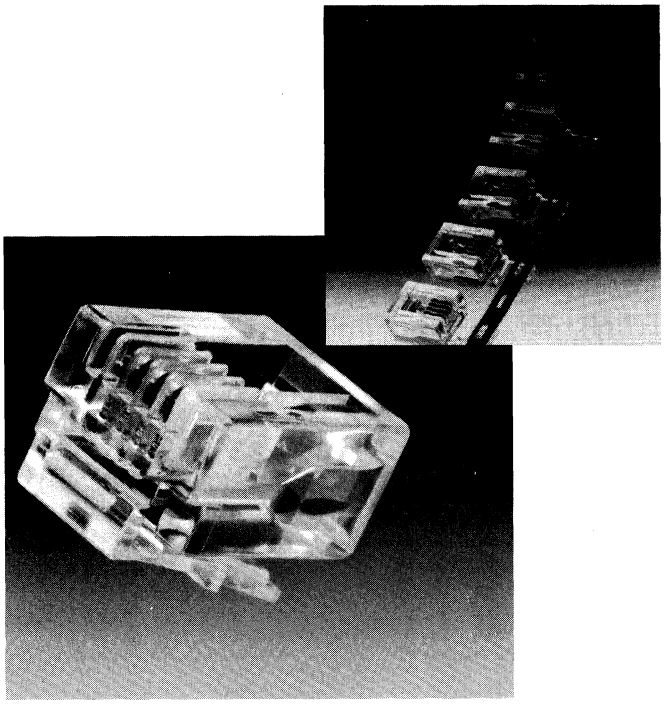
Insulation Resistance: 500 megohms min. at 500V DC

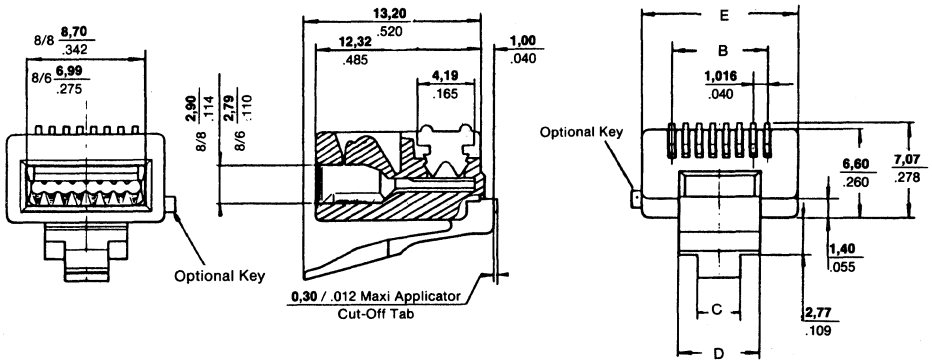
Dielectric Withstanding Voltage: 1000V AC rms

Surge Test: 1000V per REA spec PE-76

Temperature Range: –40°C to 60°C

Product Spec: PSX 90075-E





Ordering Information and Dimensions

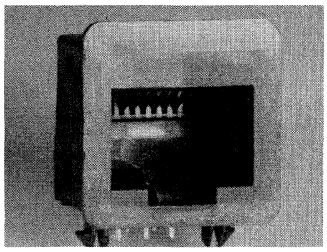
			4,6 & 8 Circuits							
			Strip Mounted Order No.		Loose Piece Order No.		Dim.			
Cts	Loaded Contacts	Key	Plating No. 1	Plating No. 1	Plating No. 1	Plating No. 2	B	C	D	E
4	4	NO	90075-0001	90075-0025	90075-0003	90075-0027	3,05 .120	2,54 .100	4,95 .195	7,62 .300
6	4	NO	-0009	• -0033	-0011	• -0035	5,08 .200	3,25 .128	6,05 .238	9,65 .380
6	4	YES	-0010	• -0034	-0012	• -0036	5,08 .200	3,25 .128	6,05 .238	9,65 .380
6	6	NO	-0005	• -0029	-0007	• -0031	5,08 .200	3,25 .128	6,05 .238	9,65 .380
6	6	YES	-0006	• -0030	-0008	• -0032	5,08 .200	3,25 .128	6,05 .238	9,65 .380
8	6	NO	-0134	• -0143	-0136	• -0145	7,11 .280	3,25 .128	6,10 .240	11,68 .460
8	8	NO	90075-0130	90075-0139	90075-0132	90075-0141	7,11 .280	3,25 .128	6,10 .240	11,68 .460

• U.S. Standard Product, available through Molex franchised distributors.

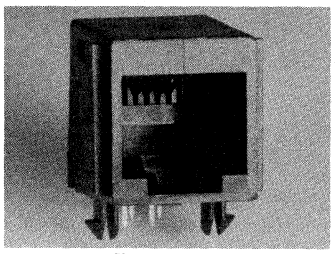
Right Angle Modular Jacks

41314 Series

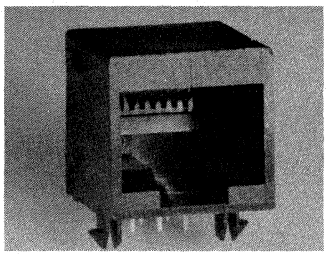
- UL File No. E107635: CSA File No. LR19980 Meets UL 1863 Sec. 8 Electrical Probe and UL 1863 Sec. 20 Child Finger Test
- For mating with W.E. Co. and FCC 68 plugs
- 50µin. au meets FCC part 68 requirements
- Duplex, plating standard - gold in contact area, tin/lead on solder tails
- Top covered leads meets British Telecom 4000 Volt test
- Contact tips guided within FCC specified target zone - Positive alignment prevents shorting
- Standard pack on film for robotic insertion or tray pack for manual insertion
- Contact factory for SMT compatible jacks
- Contacts are duplex plated after stamping, eliminating bare edges in the mating area
- Every jack must pass on line functional tests, including hi pot and continuity
- All packaging treated for anti-static
- Optional PC Clip mount for added mechanical strength



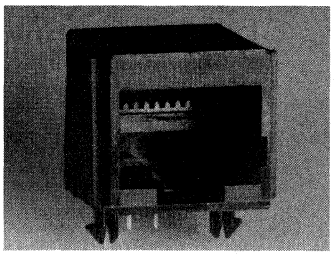
Flange Mount



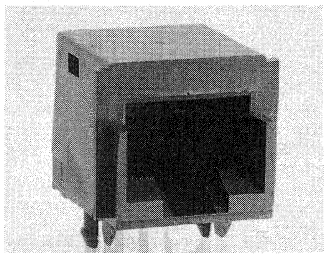
Flush Mount



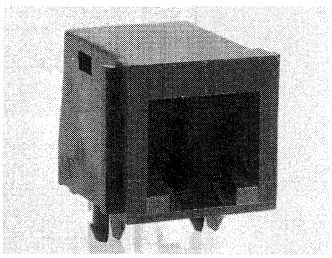
Flangeless



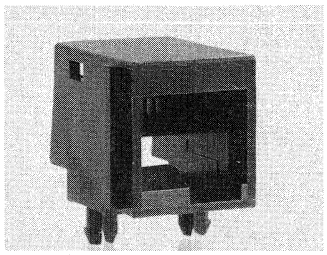
Keying Option



Notch Front 8 Ckt



Universal Flush Mount
(8 Ckt Face/6 Ckt Body)



Offset Latch 6 Ckt
DEC Connect Compatible

Specifications:

Current Rating: 1.5 amps

Dielectric Withstand Voltage: 1000 VAC RMS 60 hz, 1 min.

Insulation Resistance: 500 megohms min.

Durability: 500 mating cycles min.

Standard Housing: Black glass filled polyester 94V-0

High Temp Housing: Black glass filled nylon 94V-0

Contacts: Phosphor bronze

P.C. Board Thickness: .062" (1,57mm) thick

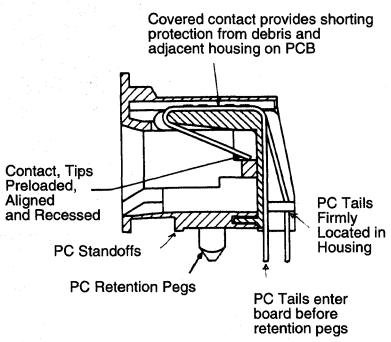
Product Specification: PS41314

Plating

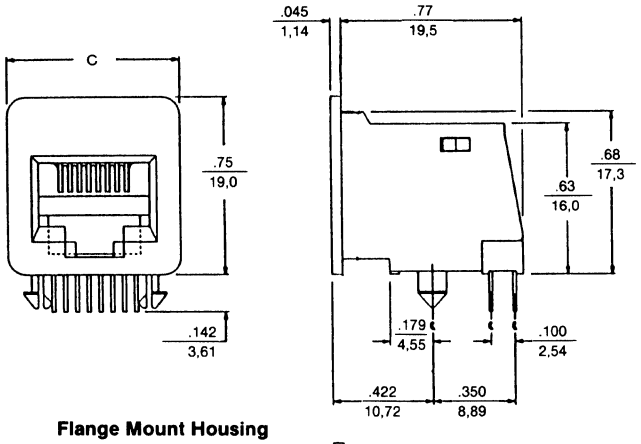
Type	Loaded Contacts	PCB Tail	Under Plate
1	50µ" Gold	50µ" Tin/Lead	50µ" Nickel
2	30µ" Gold	50µ" Tin/Lead	50µ" Nickel
3	15µ" Gold	50µ" Tin/Lead	50µ" Nickel

NOTE: FCC Part 68 requires 50µ" gold at the network interface.

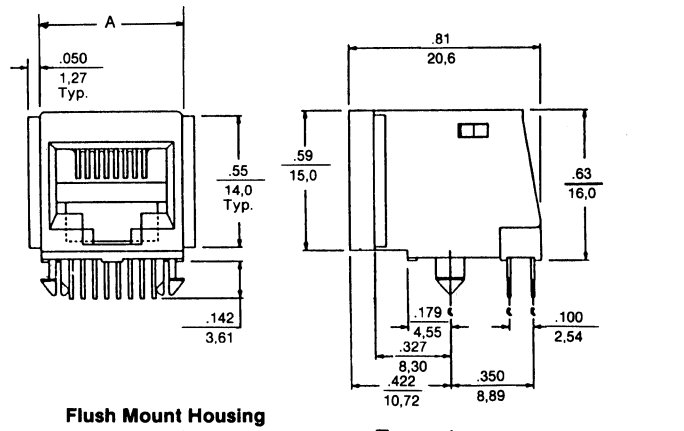
Typical Cross Section



Right Angle Modular Jacks

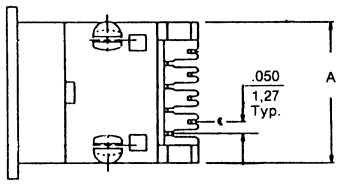


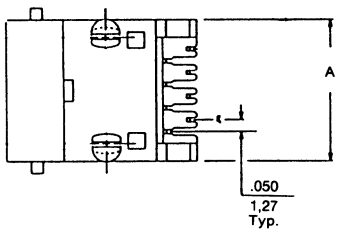
Flange Mount Housing
(8 Position Shown)

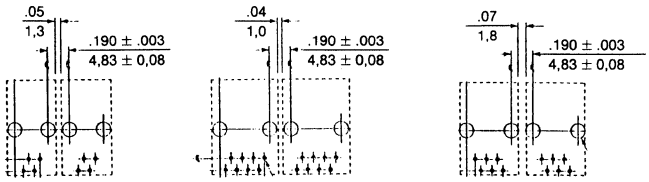


Flush Mount Housing
(8 Position Shown)

Note: Flangeless versions are identical to flush mount but without side ribs



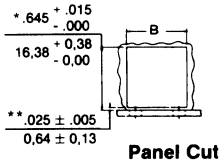




4 Position | 8 Position | 6 Position

Typical Hole Pattern for Side-by-Side Mounting of Flangeless Housings

*Dim. for Flush mount and Flangeless only.
Flange mount dim:
.695
17,65

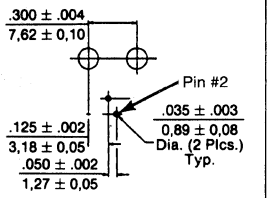


Panel Cut Out

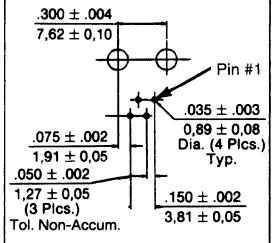
** Dim. for Flush mount and Flangeless only.
Flange mount dim:
.055
1,40

Note: All dimensions are nominal unless otherwise stated.

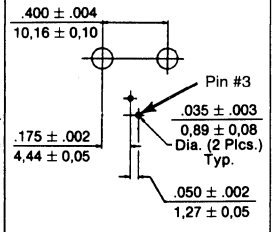
Recommended P.C. Board Layout Dimensions



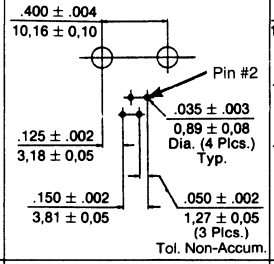
4 Pos. 2 Ckts.



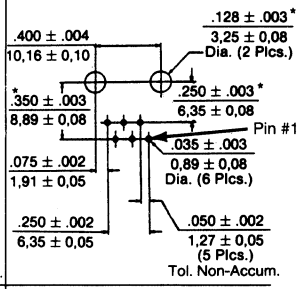
4 Pos. 4 Ckts.



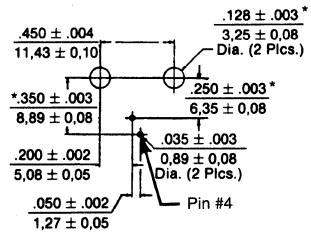
6 Pos. 2 Ckts.



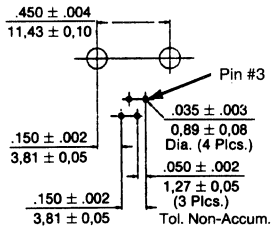
6 Pos. 4 Ckts.



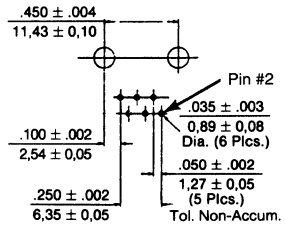
6 Pos. 6 Ckts.



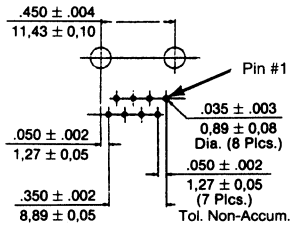
8 Pos. 2 Ckts.



8 Pos. 4 Ckts.



8 Pos. 6 Ckts.



8 Pos. 8 Ckts.

Note: Dimensions marked with asterisk (*) are typical for each layout shown above.

Right Angle Modular Jacks

molex®

Preferred Version in the Americas

Ordering Information and Dimensions - Standard Temperature Jacks

Housing Size	Loaded Contacts	Flange Mount Film Pack Order No.	Flange Mount Tray Pack Order No.	Flush Mount Film Pack Order No.	Flush Mount Tray Pack Order No.	Flangeless Mount Film Pack Order No.	Flangeless Mount Tray Pack Order No.	Universal Service Order Code	Plating	Keyed	Dimensions		
											A	B*	C*
4	2	15-43-6042	•15-43-6542	15-43-7040	•15-43-7540	15-43-8041	•15-43-8541		1	No	.44 11,2	.455 11,56	.57 14,5
4	4	15-43-6044	•15-43-6544	15-43-7044	•15-43-7544	15-43-8044	•15-43-8544		1	No	.44 11,2	.455 11,56	.57 14,5
6	2	15-43-6063	•15-43-6563	15-43-7063	•15-43-7563	15-43-8061	•15-43-8561	RJ11W/RJ11C	1	No	.52 13,2	.535 13,59	.65 16,5
6	4	15-43-6064	•15-43-6564	15-43-7064	•15-43-7564	15-43-8064	•15-43-8564	RJ16	1	No	.52 13,2	.535 13,59	.65 16,5
6	6	15-43-6066	•15-43-6566	15-43-7066	•15-43-7566	15-43-8066	•15-43-8566	RJ12/RJ18/RJ25	1	No	.52 13,2	.535 13,59	.65 16,5
6 Offset Latch	6	—	—	15-43-6111	15-43-6110	—	—		1	Offset latch DECconnect	.52 13,2	.535 13,59	—
8	2	15-43-6090	•15-43-6590	15-43-7080	•15-43-7580	15-43-8090	•15-43-8590		1	No	.60 15,2	.615 15,62	.73 18,5
8 Keyed	2	15-43-6248	15-43-6251	15-43-9010	•15-43-9510	15-43-8010	•15-43-8510		1	Yes/RJ-45	.60 15,2	.615 15,62	.73 18,5
8	4	15-43-6084	•15-43-6584	15-43-7084	•15-43-7584	15-43-8084	•15-43-8584		1	No	.60 15,2	.615 15,62	.73 18,5
8 Keyed	4	15-43-6242	15-43-6245	15-43-9007	•15-43-9507	15-43-8007	•15-43-8507		1	Yes/RJ-45	.60 15,2	.615 15,62	.73 18,5
8	6	15-43-6086	•15-43-6586	15-43-7086	•15-43-7586	15-43-8086	•15-43-8586		1	No	.60 15,2	.615 15,62	.73 18,5
8 Keyed	6	15-43-6236	15-43-6239	15-43-9004	•15-43-9504	15-43-8004	•15-43-8504		1	Yes/RJ-45	.60 15,2	.615 15,62	.73 18,5
8	8	15-43-6088	•15-43-6588	15-43-7088	•15-43-7588	15-43-8088	•15-43-8588	RJ48	1	No	.60 15,2	.615 15,62	.73 18,5
8 Keyed	8	15-43-6230	15-43-6233	15-43-9001	•15-43-9501	15-43-8001	•15-43-8501	RJ-14/RJ45	1	Yes/RJ-45	.60 15,2	.615 15,62	.73 18,5
8/6 Universal	6	—	—	—	15-43-5166	—	—		1	No	.52 13,2	.615 15,62	—
8 Notch Front	8	—	—	15-43-7098	—	—	—		1	No	.60 15,2	.615 15,62 .480 12,19	—

Plating 1: 50 Microinches gold
• U.S. Standard Product, available through Molex franchised distributors.

* Dim. C applies to flange mount only.
Dim. B applies to panel cut-outs only.
Dimensions are for reference. Obtain sales drawings for additional information.

Ordering Information and Dimensions - High Temp/SMT Compatible

Housing Size	Loaded Contacts	Flange Mount Film Pack Order No.	Flange Mount Tray Pack Order No.	Flush Mount Film Pack Order No.	Flush Mount Tray Pack Order No.	Flangeless Mount Film Pack Order No.	Flangeless Mount Tray Pack Order No.	Universal Service Order Code	Plating	Keyed	Dimensions		
											A	B*	C*
4	2	15-43-9106	15-43-9109	15-43-9606	15-43-9609	15-43-6126	15-43-6129		1	No	.44 11,2	.455 11,56	.57 14,5
4	4	15-43-9100	15-43-9103	15-43-9600	15-43-9603	15-43-6120	15-43-6123		1	No	.44 11,2	.455 11,56	.57 14,5
6	2	15-43-9124	15-43-9127	15-43-9624	15-43-9627	15-43-6144	15-43-6147	RJ11W/RJ11CC	1	No	.52 13,2	.535 13,59	.65 16,5
6	4	15-43-9118	15-43-9121	15-43-9618	15-43-9621	15-43-6138	15-43-6141	RJ11/RJ13/RJ14 RJ16/RJIDC	1	No	.52 13,2	.535 13,59	.65 16,5
6	6	15-43-9112	15-43-9115	15-43-9612	15-43-9666	15-43-6132	15-43-6135	RJ12/RJ18/RJ25	1	No	.52 13,2	.535 13,59	.65 16,5
8	2	15-43-9148	15-43-9151	15-43-9648	15-43-9651	15-43-6194	15-43-6197		1	No	.60 15,2	.615 15,62	.73 18,5
8 Keyed	2	15-43-6748	15-43-6751	15-43-6030	15-43-6530	15-43-9818	15-43-9821		1	RJ45	.60 15,2	.615 15,62	.73 18,5
8	4	15-43-9142	15-43-9145	15-43-9642	15-43-9645	15-43-6188	15-43-6191		1	No	.60 15,2	.615 15,62	.73 18,5
8 Keyed	4	15-43-6742	15-43-6745	15-43-6027	15-43-6527	15-43-9812	15-43-9815		1	RJ45	.60 15,2	.615 15,62	.73 18,5
8	6	15-43-9136	15-43-9139	15-43-9636	15-43-9639	15-43-6182	15-43-6185		1	No	.60 15,2	.615 15,62	.73 18,5
8 Keyed	6	15-43-6736	15-43-6739	15-43-6024	15-43-6524	15-43-9806	15-43-9809		1	RJ45	.60 15,2	.615 15,62	.73 18,5
8	8	15-43-9130	15-43-9133	15-43-9630	15-43-9886	15-43-6176	15-43-6179	RJ48	1	No	.60 15,2	.615 15,62	.73 18,5
8 Keyed	8	15-43-6730	15-43-6733	15-43-6021	15-43-6521	15-43-9801	15-43-9804	RJ45	1	RJ45	.60 15,2	.615 15,62	.73 18,5

Plating 1: 50 Microinches gold

* Dim. C applies to flange mount only.
Dim. B applies to panel cut-outs only.
Dimensions are for reference. Obtain sales drawings for additional information.

Right Angle Telephone Jack Standard Profile

95009 Series

- Mates with FCC-68 Plug
- Industry compatible foot prints
- Flush mount
- Split snap-fit retention pegs
- Selective plating - gold on contact area, tin-lead on solder tails
- High reliability, square contacts

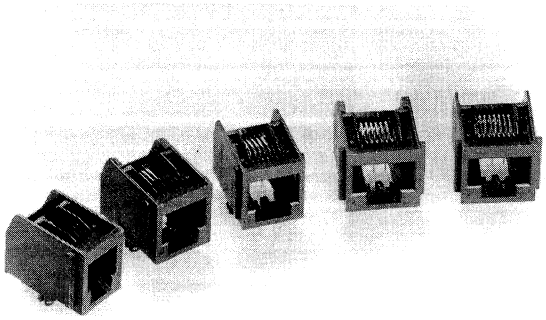
Specifications:

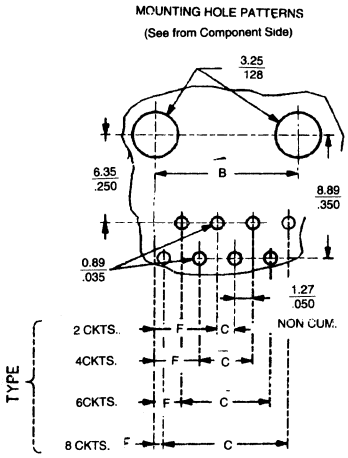
Housing: Black polyester UL 94V-O

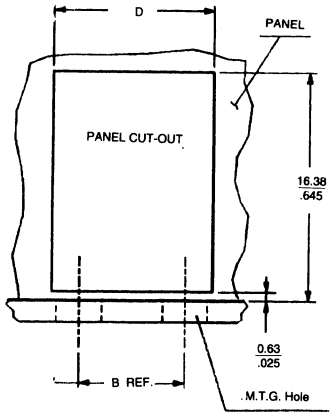
Contact Material: Phosphor Bronze

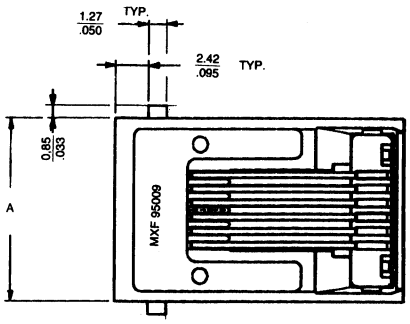
Plating:

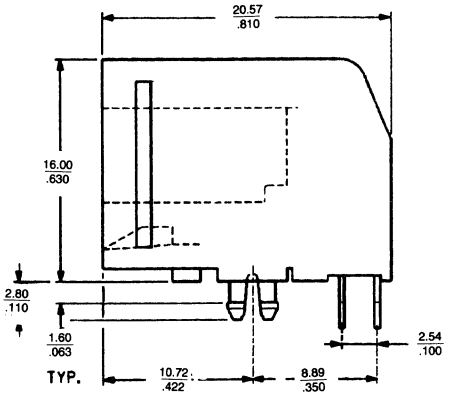
Plating 2: Post plate 1,27-1,52µm/50-60µinch gold in contact area, 1,90µm/75µinch min. (90/10) tin/lead in tail area both over 1,27µm/50µinch min. nickel overall

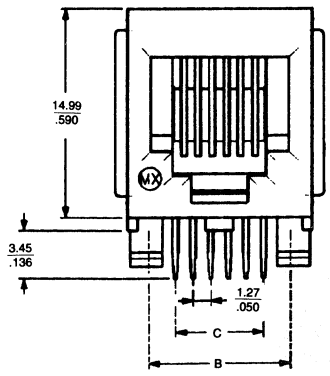












Ordering Information and Dimensions (Preferred version in Europe)

Cts	Loaded Contacts	Order No.	Platings	Key	Dim. A	Dim. B	Dim. C	Dim. D	Dim. F
4	4	•95009-2441 95009-2447	2 2	Yes No	**11,18** .440	**7,62** .390	**3,81** .150	**11,56** .455	**1,27** .050
6	4	•95009-2641 •95009-2647	2 2	Yes No	**13,21** .520	**10,16** .400	**3,81** .150	**13,59** .535	**3,17** .125
6	6	95009-2661 95009-2667	2 2	Yes No	**15,24** .600	**10,16** .400	**6,35** .250	**13,59** .535	**1,90** .075
8	6	95009-2861	2	Yes	**15,24** .600	**11,43** .450	**6,35** .250	**15,62** .615	**2,54** .100
8	8	95009-2881	2	Yes	**15,24** .600	**11,43** .450	**8,89** .350	**15,62** .615	**1,27** .050

•U.S. Standard Product, available through Molex franchised distributors.

Right Angle Modular Telephone Jacks

90077 Series

- For mating with FCC-68 plugs 87031 Series
- Industry compatible
- Flush mounted
- Selective plating - gold on contact area, tin on solder posts
- Non-keyed version
- 4 and 6 ckt. versions with bubble lock retention pegs. 8 ckt. versions with snap-in retention pegs
- UL recognized

Specifications:

Housing: Black ployester UL 94V-0

Plating:

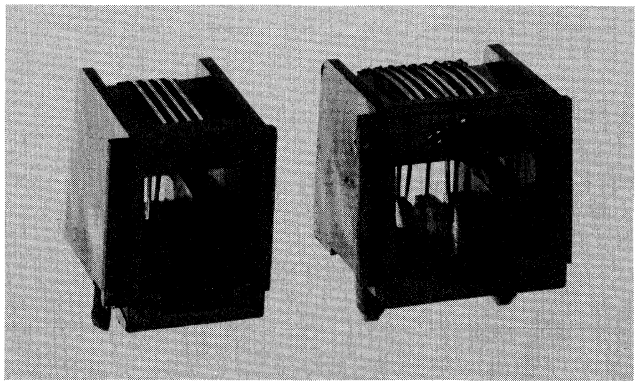
Plating 1: post plate 0,76µm/30µ inch gold in contact area. 1.27µm/50µinch 60/40 tin/lead in tail area, both over 1,27µm/ 50µinch nickel overall

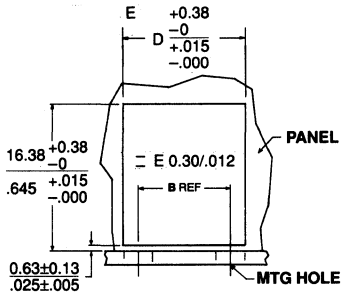
Plating 2: same as plating 1 except post plate 1,27µm/ 50µinch gold in contact area

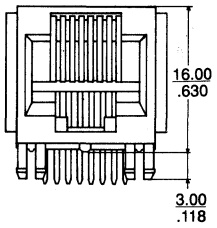
PC Board Thickness: 1,57mm/ .062 inch

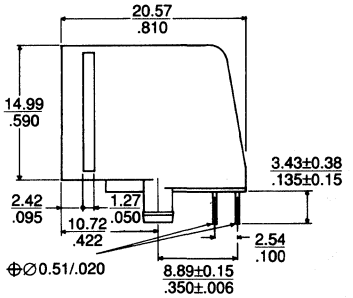
PC Board Retention: 9.07kb/20 lbs.

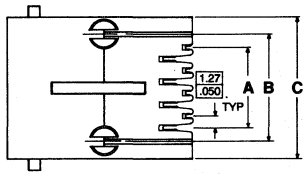
Product Spec: PSX90077-E





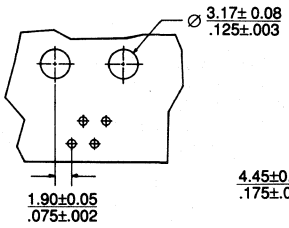




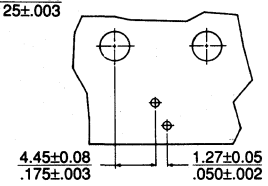


mm
inch

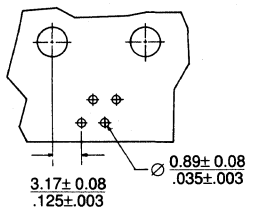
Below: P.C.B. Hole Layout Seen from Component Side



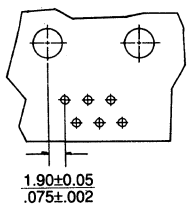
4 Pos. 4 Ckts.



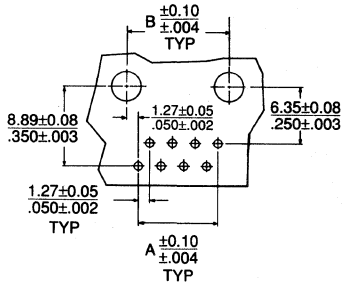
6 Pos. 2 Ckts.



6 Pos. 4 Ckts.



6 Pos. 6 Ckts.



8 Pos. 8 Ckts.

Note: All dimensions are nominal unless otherwise stated.

Ordering Information and Dimensions (Preferred Version in the Far East)

Circuits	Loaded Contacts	Flush Mounting	Plating No.	Dim. A	Dim. B	Dim. C	Dim. D
4	4	90077-1077	1	3,81 .150	7,62 .400	11,18 .440	11,56 .456
		90077-1078	2				
6	2	90077-1095	1	1,27 .050	10,16 .400	13,21 .520	13,59 .535
		90077-1075	2				
6	4	90077-1076	1	3,81 .150	10,16 .400	13,21 .520	13,59 .535
		90077-1073	2				
6	6	90077-1081	1	6,36 .250	10,16 .400	13,21 .520	13,59 .535
		90077-1082	2				
8	6	90077-1064	1	8,89 .350	11,43 .450	15,24 .600	15,62 .615
		90077-1065	2				
8	8	90077-1070	1	8,89 .350	11,43 .450	15,24 .600	15,62 .615
		90077-1071	2				

Low Profile Right Angle Telephone Jacks

95001 Series

- Mates with FCC-68 Plug
- Very low profile - about 3/4 that of industry standard
- Automatic placement possible
- CSA certified/UL listed
- Foot pattern identical to industry standard
- High reliability, square contact

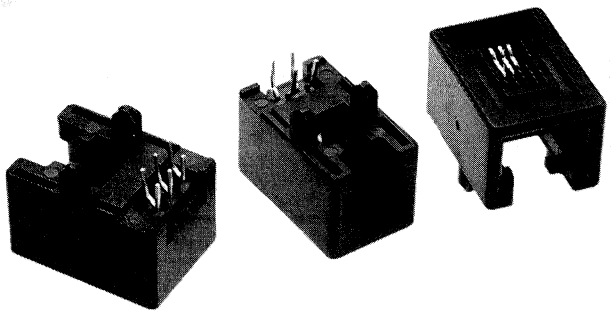
Specifications:

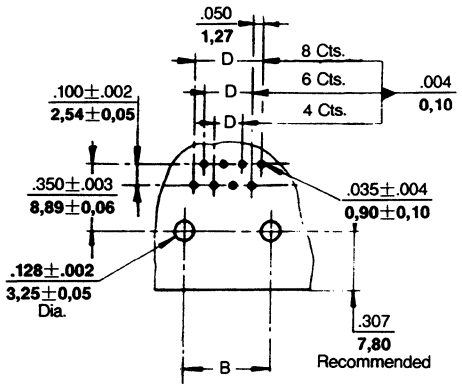
Housing: Black polyester UL 94V-O

Contact Material: Phosphor Bronze

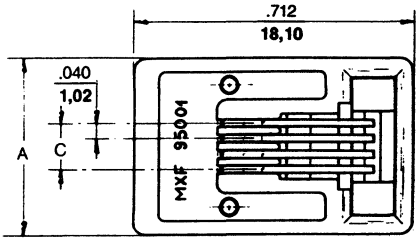
Plating:

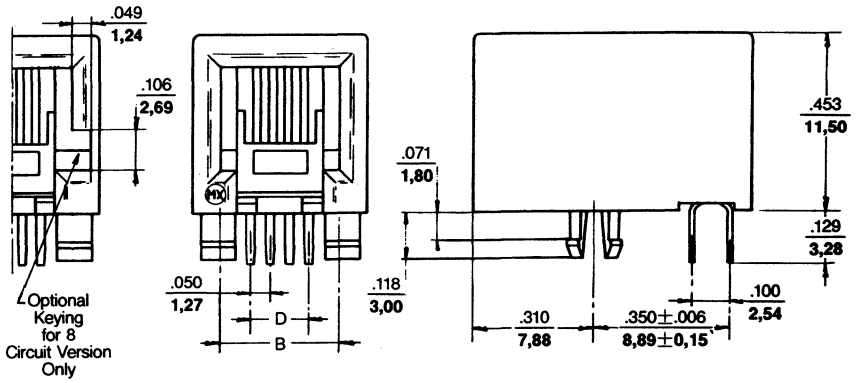
Plating 2: Post plate 1,27-1,52µm/50-60µinch gold in contact area, 1,90µm/75µinch min. (90/10) tin/lead in tail area both over 1,27µm/50µinch min. nickel overall





P.C.B. Hole Layout Seen from Component Side





NOTE: All dimensions are nominal unless otherwise specified.

Ordering Information and Dimensions

Cts	Loaded Contacts	Order No.	Platings	Key	Dim. A	Dim. B	Dim. C	Dim. D
4	4	•95001-2441	2	No	11,18 .440	7,62 .300	3,05 .120	3,81 .150
6	4	•95001-2641	2	No	13,21 .520	10,16 .400	3,05 .120	3,81 .150
6	6	•95001-2661	2	No	13,21 .520	10,16 .400	5,08 .200	6,35 .250
8	6	•95001-2861	2	No	15,24 .600	11,43 .450	5,08 .200	6,35 .250
8	8	•95001-2881	2	No	15,24 .600	11,43 .450	7,11 .280	8,89 .350
8	8	•95001-2882	2	Yes	15,24 .600	11,43 .450	7,11 .280	8,89 .350

•U.S. Standard Product, available through Molex franchised distributors.

Right Angle P.C. Solder Tail Telephone Jacks

52018 Series

- Industry compatible
- Selective gold platings
- Fits FCC-68 specification
- Stamped contact

Specifications:

Housing: Glass filled polyester 94V-0

Material Contact: Phosphor Bronze

Contact Resistance: 20 milliohms maximum, initial

Insulation Resistance: 10 megohms (DC 500V)

Dielectric Strength: 1000V AC for 1 minute

Plating:

Plating 1: 0,1µm/4µinch minimum gold over nickel 1,0µm/40 µinch minimum

Plating 2: 0,38µm/15µinch minimum gold over nickel 1,0 µm/40µinch minimum

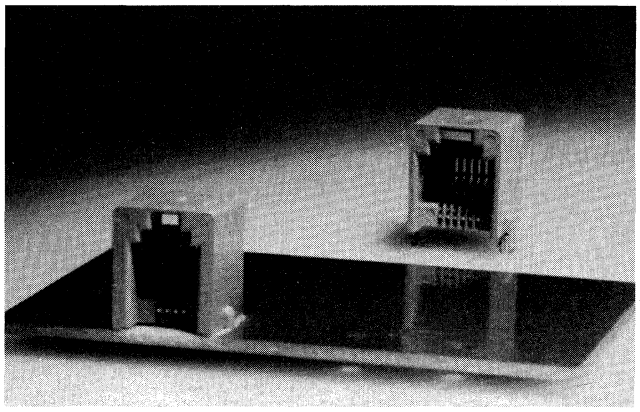
Plating 3: 0,76µm/30µinch minimum gold over nickel 1,0 µm/40µinch minimum

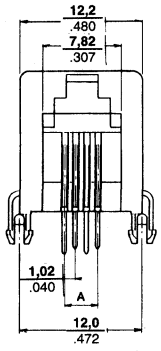
Plating 4: 1,27µm/50µinch minimum gold over nickel 1,0 µm/40µinch minimum

Solder area: Tin-Lead

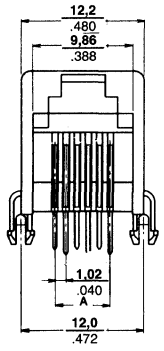
PC Board Thickness: 1,57mm/.062 inch

Current Rating: 1.2A

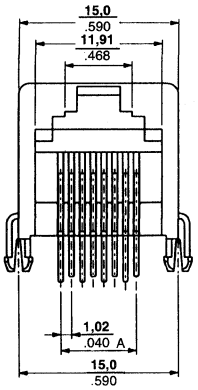




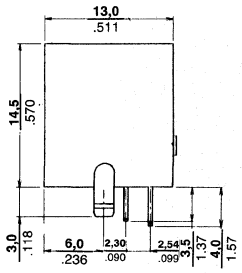
52018-4 Position



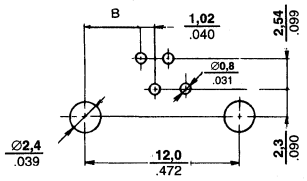
52018-6 Position



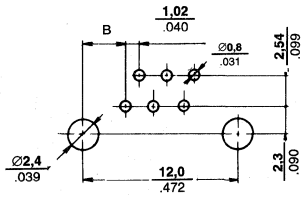
52018-8 Position



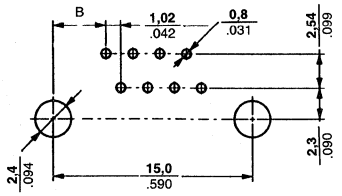
Common for circuits 4, 6, and 8



52018-4 Position
P.C.B. Hole Layout
Seen from Component Side



52018-6 Position
P.C. B. Hole Layout
Seen from Component Side



52018-8 Position
P.C.B. Hole Layout
Seen from Component Side

Ordering Information and Dimensions

Cts	Loaded Contacts	Order No.	Plating No.	A	B	Cts	Loaded Contacts	Order No.	Plating No.	A	B
4	2	52018-4215	1	1,02 .040	5,49 .216	6	6	52018-6635	3	5,08 .200	3,46 .136
4	2	-4225	2	1,02 .040	5,49 .216	6	6	-6645	4	5,08 .200	3,46 .136
4	2	-4235	3	1,02 .040	5,49 .216	8	2	-8215	1	1,02 .040	6,99 .275
4	2	-4245	4	1,02 .040	5,49 .216	8	2	-8225	2	1,02 .040	6,99 .275
4	4	-4415	1	3,05 .120	4,48 .176	8	2	-8235	3	1,02 .040	6,99 .275
4	4	-4425	2	3,05 .120	4,48 .176	8	2	-8245	4	1,02 .040	6,99 .275
4	4	-4435	3	3,05 .120	4,48 .176	8	4	-8415	1	3,05 .120	5,98 .235
4	4	-4445	4	3,05 .120	4,48 .176	8	4	-8425	2	3,05 .120	5,98 .235
6	2	-6215	1	1,02 .040	5,49 .216	8	4	-8435	3	3,05 .120	5,98 .235
6	2	-6225	2	1,02 .040	5,49 .216	8	4	-8445	4	3,05 .120	5,98 .235
6	2	-6235	3	1,02 .040	5,49 .216	8	6	-8615	1	5,08 .200	4,96 .195
6	2	-6245	4	1,02 .040	5,49 .216	8	6	-8625	2	5,08 .200	4,96 .195
6	4	-6415	1	3,05 .120	4,48 .176	8	6	-8635	3	5,08 .200	4,96 .195
6	4	-6425	2	3,05 .120	4,48 .176	8	6	-8645	4	5,08 .200	4,96 .195
6	4	-6435	3	3,05 .120	4,48 .176	8	8	-8815	1	7,11 .280	3,94 .155
6	4	-6445	4	3,05 .120	4,48 .176	8	8	-8825	2	7,11 .280	3,94 .155
6	6	-6615	1	5,08 .200	3,46 .136	8	8	-8835	3	7,11 .280	3,94 .155
6	6	52018-6625	2	5,08 .200	3,46 .136	8	8	52018-8845	4	7,11 .280	3,94 .155

Right Angle Modular Jacks With Metal Pegs

52065 Series

- ☐ Metal hold down pegs
- ☐ Meets FCC-68 specifications
- ☐ Insert molded
- ☐ Industry compatible

Specifications:

Housing: Glass filled polyester 94V-0

Material Contact: Phosphor bronze

Plating:

Plating 1: 0,1µm/4µinch minimum gold over nickel 1,0µm/40 µinch minimum

Plating 2: 0,38µm/15µinch minimum gold over nickel 1,0 µm/40µinch minimum

Plating 3: 0,76µm/30µinch minimum gold over nickel 1,0 µm/40µinch minimum

Plating 4: 1,27µm/50µinch minimum gold over nickel 1,0 µm/40µinch minimum

Solder Area: Tin-Lead

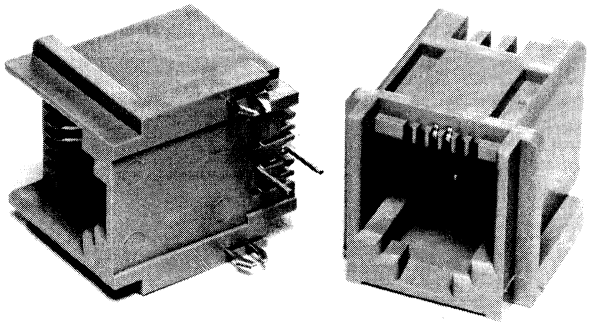
PC Board Thickness: 1,57mm/.062 inch

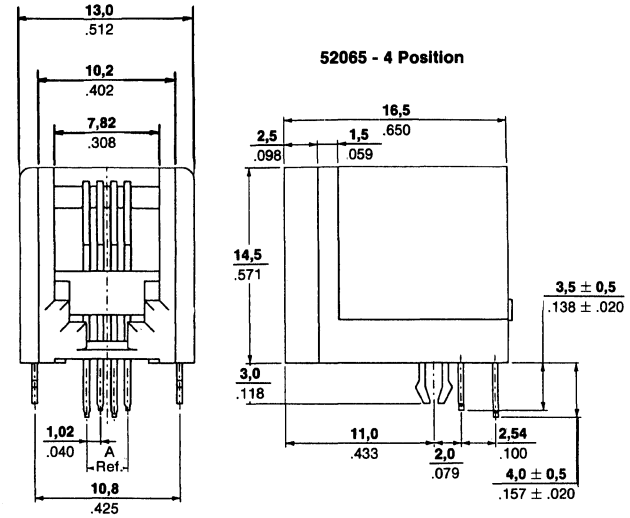
Current Rating: 1.2A

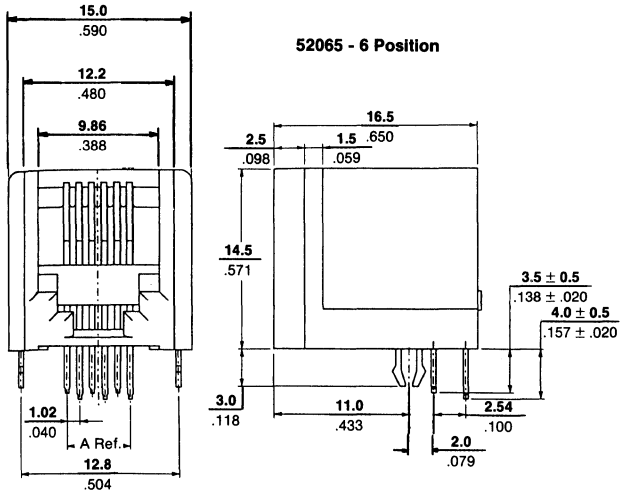
Contact Resistance: 20 milliohms maximum, initial

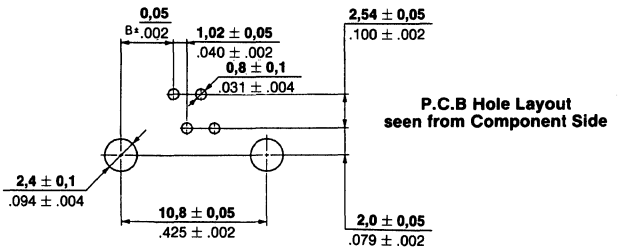
Insulation Resistance: 1000 megohms (DC 500V)

Dielectric Strength: 1000V AC for 1 minute

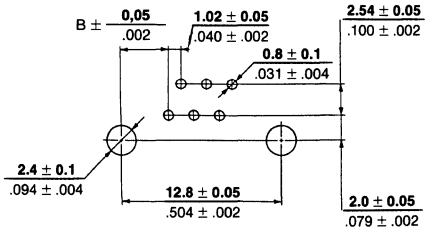








P.C.B Hole Layout seen from Component Side



Note: All dimensions are nominal unless otherwise stated.

Ordering Information and Dimensions

Cts	Loaded Contacts	Order No.	Plating No.	Dim. A	Dim. B	Cts	Loaded Contacts	Order No.	Plating No.	Dim. A	Dim. B
4	2	52065-4215	1	1,02 0.040	4,89 0.192	6	2	52065-6235	3	1,02 0.040	5,89 0.232
4	2	-4225	2	1,02 0.040	4,89 0.192	6	2	-6245	4	1,02 0.040	5,89 0.232
4	2	-4235	3	1,02 0.040	4,89 0.192	6	4	-6415	1	3,05 0.120	4,87 0.192
4	2	-4245	4	1,02 0.040	4,89 0.192	6	4	-6425	2	3,05 0.120	4,87 0.192
4	4	-4415	1	3,05 0.120	3,87 0.152	6	4	-6435	3	3,05 0.120	4,87 0.192
4	4	-4425	2	3,05 0.120	3,87 0.152	6	4	-6445	4	3,05 0.120	4,87 0.192
4	4	-4435	3	3,05 0.120	3,87 0.152	6	6	-6615	1	5,08 0.200	3,85 0.152
4	4	-4445	4	3,05 0.120	3,87 0.152	6	6	-6625	2	5,08 0.200	3,85 0.152
6	2	-6215	1	1,02 0.040	5,89 0.232	6	6	-6635	3	5,08 0.200	3,85 0.152
6	2	52065-6225	2	1,02 0.040	5,89 0.232	6	6	52065-6645	4	5,08 0.200	3,85 0.152

Modular Telephone Jack
P.C. Solder Tail, 616-/623-Type

90332 Series

- Mates with FCC-68 plugs of 90075/87031 series
- Industry compatible
- Improved locking peg provides more stable pcb retention and easier mounting
- Tray packaged

Specifications:

Housing: ABS grey UL 94V-O

Contact Material: Phosphor Bronze

PC Board Thickness: .062" (1.57mm) thick

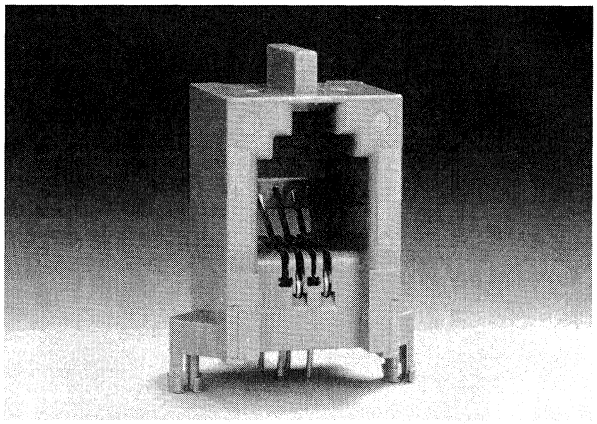
Plating:

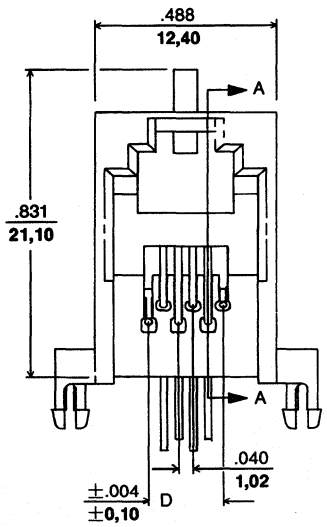
Plating 1: 15μin/0.38μm gold in contact area

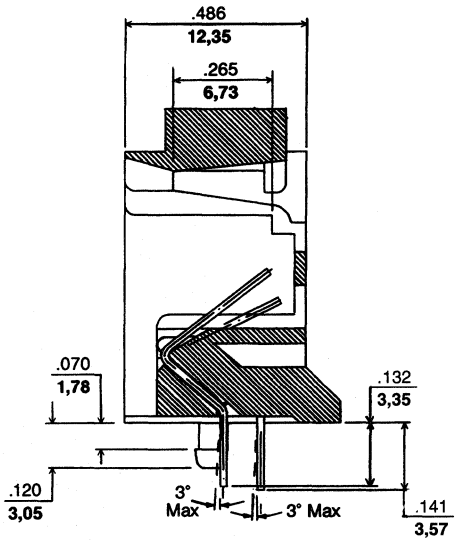
Plating 2: 30μin/0.76μm gold in contact area

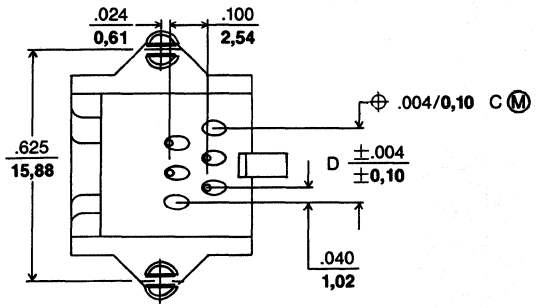
Plating 6: 50μin/1.30μm gold in contact area

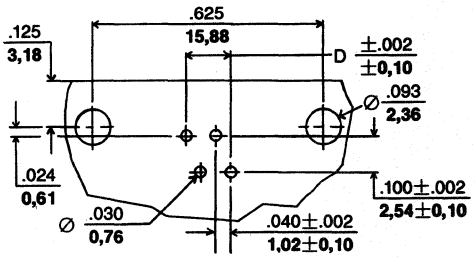
Note: All have underplating of 75μin/1.90μm min. tin/lead over 100μin min, nickel overall.



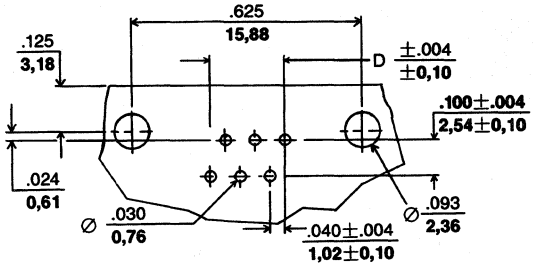








PCB Layout for 4 Ckt



PCB Layout for 6 Ckt

inch
mm

Ordering Information and Dimensions

Cts	Loaded Contacts	Order No.	Dim. D	Plating N
4	4	90332-1040 90332-1041 90332-1045	.120 3,05	1 2 6
6	2	90332-1058 90332-1059 90332-1063	.201 5,10	1 2 6
6	4	90332-1046 90332-1047 90332-1051	.201 5,10	1 2 6
6	6	90332-1052 90332-1053 90332-1057	.201 5,10	1 2 6

Right Angle P.C. Solder Tail Telephone Jacks

96700 Series

- Fits FCC-68 specifications
- For handset applications
- Round pin terminals
- For use with 1,57mm/ .062 inch PCBs
- UL recognized, CSA certified

Specifications:

Housing: Glass filled polyester, light grey

Contact Material: Phosphor Bronze

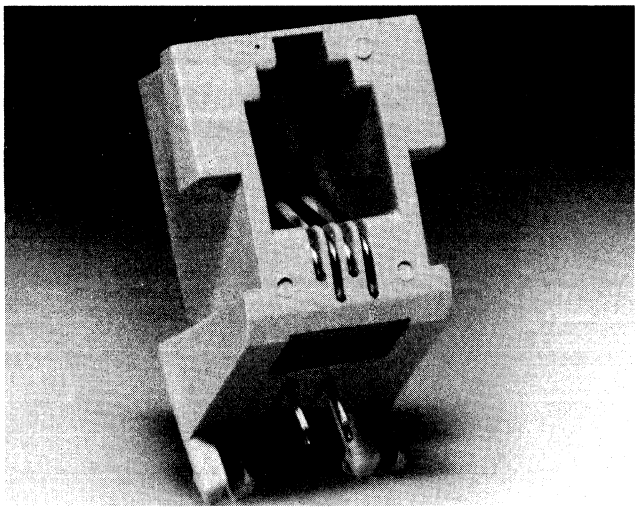
Plating: 1,27 µm/50 µinch gold over 2,54 µm/100 µinch nickel. Other platings, contact factory

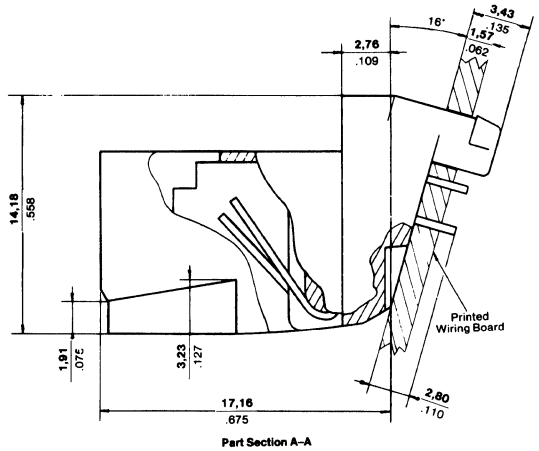
Current Rating: 1.2A

Contact Resistance: 20 milliohms max. initial

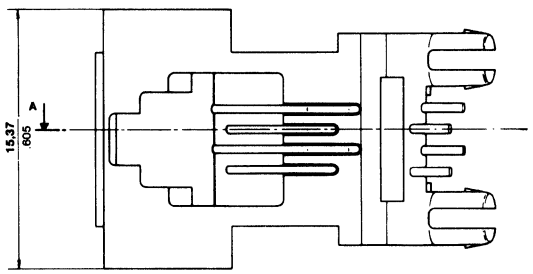
Insulation Resistance: 10 megohms (DC 500V)

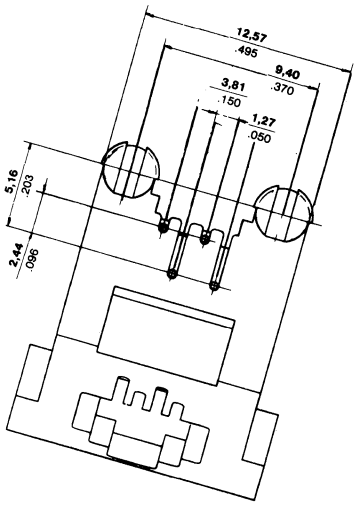
Dielectric Strength: 1000V AC for 1 minute

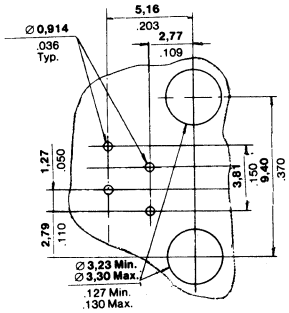




Part Section A–A







Mounting Hole Pattern

Note: All dimensions are nominal unless otherwise stated.

Ordering Information

Circuits	Order No.
4	96700-0001

SMT Telephone Jack

95001 — SMT Series
Surface Mount Version

- Mates with FCC-68 Plug
- High reliability, square contact
- Very low profile

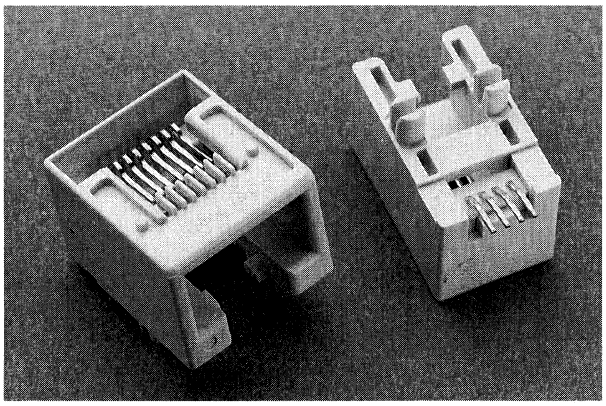
Specifications:

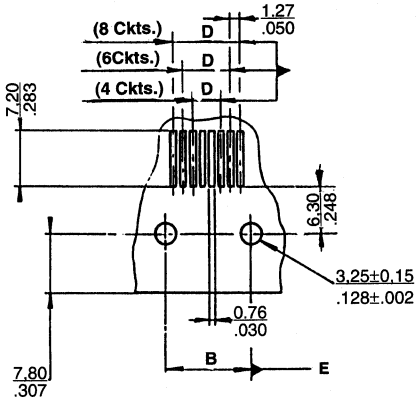
Housing: Grey polyester UL 94V-O

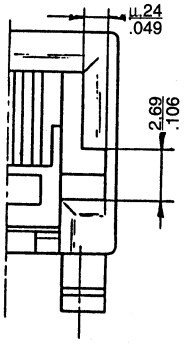
Contact Material: Phosphor Bronze

Plating:

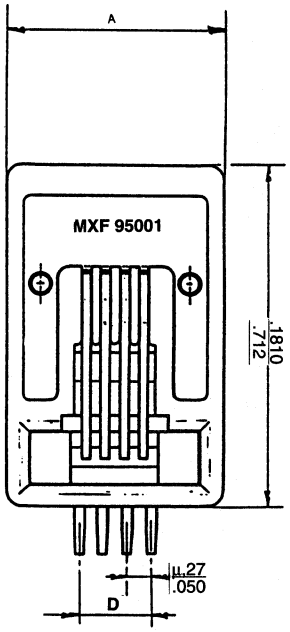
Plating 2: Post plate 1,27-1,52µm/50-60µinch gold in contact area, 1,90µm/75µinch min. (90/10) tin/lead in tail area both over 1,27µm/50µinch min. nickel overall

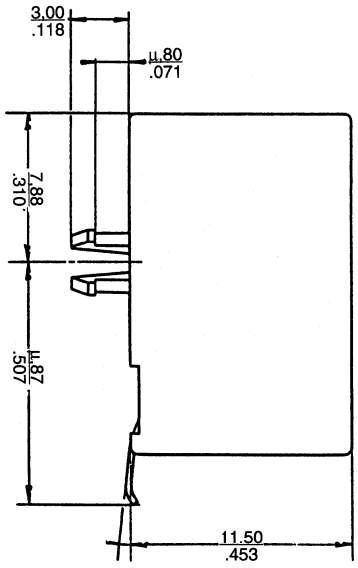


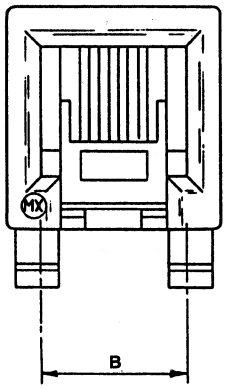




Optional Keying







Ordering Information and Dimensions

Cts	Loaded Contacts	Order No.	Platings	Key	Dim. A	Dim. B	Dim. D
4	4	•95001-6441	2	No	**11,18** .440	**7,62** .300	**3,81** .150
6	4	•95001-6641	2	No	**13,21** .520	**10,16** .400	**3,81** .150
6	6	•95001-6661	2	No	**13,21** .520	**10,16** .400	**6,35** .250
8	6	•95001-6861	2	No	**15,24** .600	**11,43** .450	**6,35** .250
8	8	•95001-6881	2	No	**15,24** .600	**11,43** .450	**8,89** .350
8	8	•95001-6882	2	Yes	**15,24** .600	**11,43** .450	**8,89** .350

•U.S. Standard Product, available through Molex franchised distributors.

Right Angle Low Profile Shielded P.C. Jack

95040 Series

- Mates with FCC-68 Plug
- High reliability, square contact
- EMI/RFI Protection
- ISDN Standard

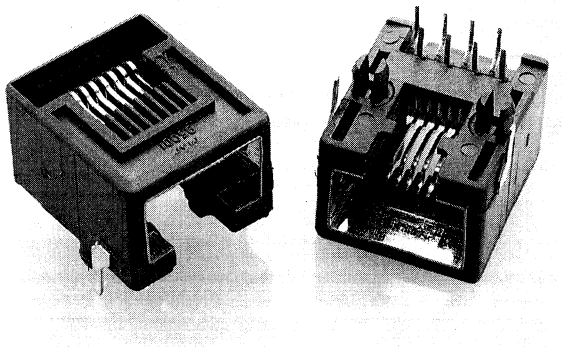
Specifications:

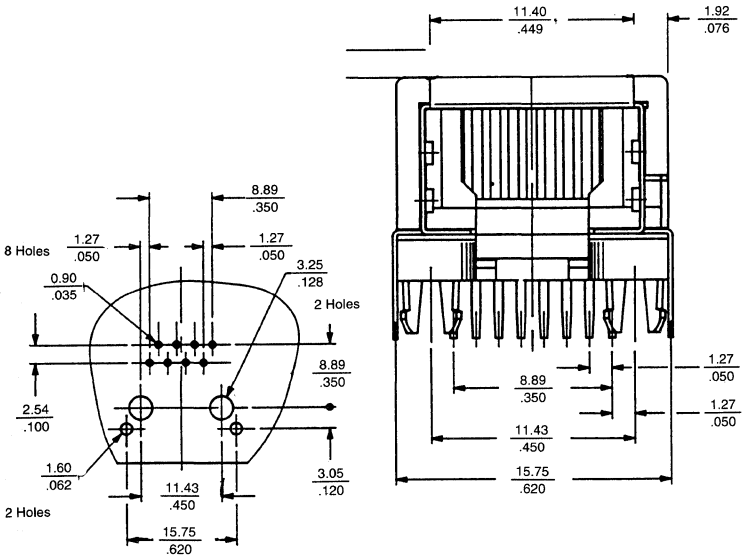
Housing: Black polyester UL 94V-O

Contact Material: Phosphor Bronze

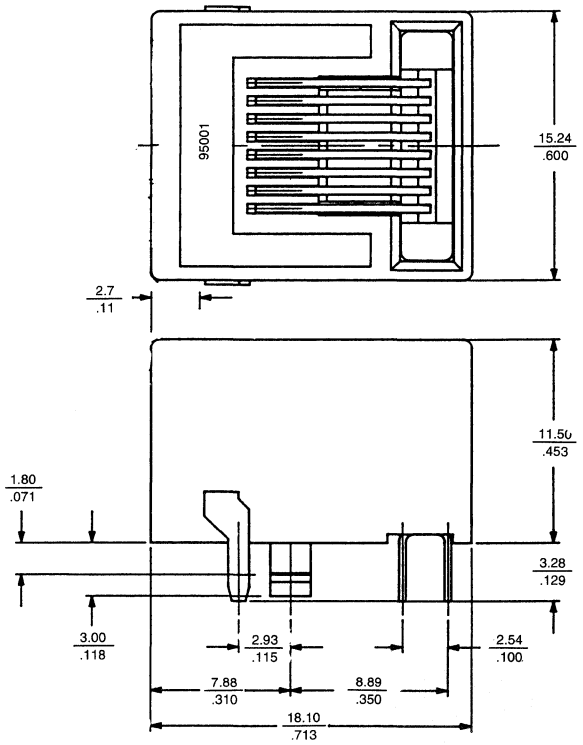
Plating:

Plating 2: Post plate 1,27-1,52µm/50-60µinch gold in contact area, 1,90µm/75µinch min. (90/10) tin/lead in tail area both over 1,27µm/50µinch min. nickel overall





P.C.B. Mounting Patterns



Ordering Information and Dimensions

Cts	Loaded Contacts	Order No.	Platings	Key
8	8	•95040-2881	2	No

Right Angle Shielded Low Profile P.C. Jack with Key

95060 Series

- Mates with FCC-68 Plug
- High Reliability, square contact
- EMI/RFI Protection
- ISDN Standard
- Keyed version of 95040
- Very low profile

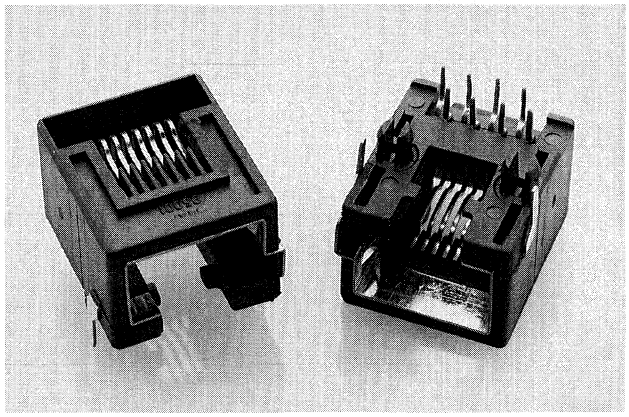
Specifications:

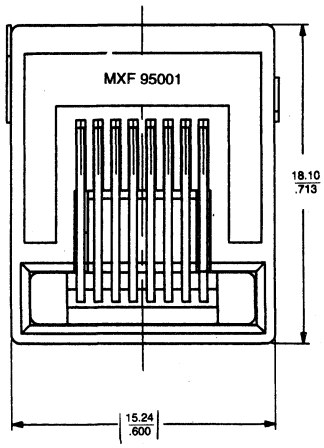
Housing: Black polyester UL 94V-O

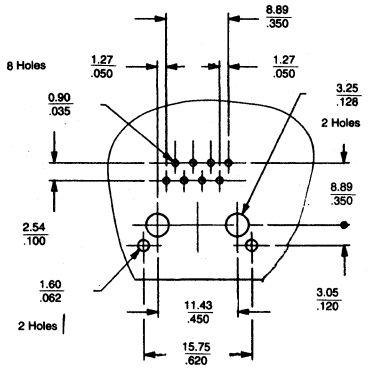
Contact Material: Phosphor Bronze

Plating:

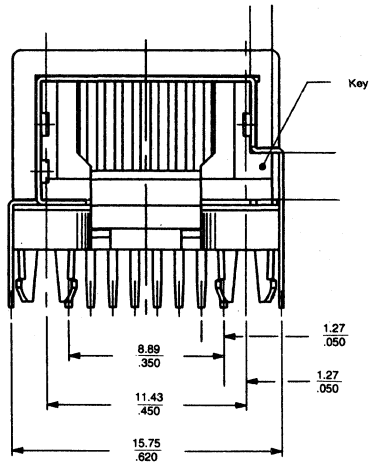
Plating 2: Post plate 1,27-1,52µm/50-60µinch gold in contact area, 1,90µm/75µinch min. (90/10) tin/lead in tail area both over 1,27µm/50µinch min. nickel overall

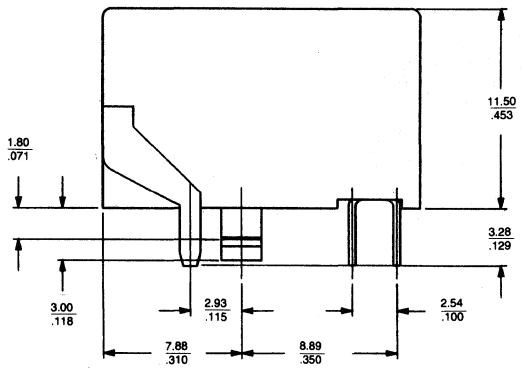






P.C.B. Mounting Patterns





Ordering Information and Dimensions

Cts	Loaded Contacts	Order No.	Platings	Key
8	8	•95060-2882	2	Yes

Top Entry Jack
Shunt Version

95033 Series

- Mates with FCC-68 Plug

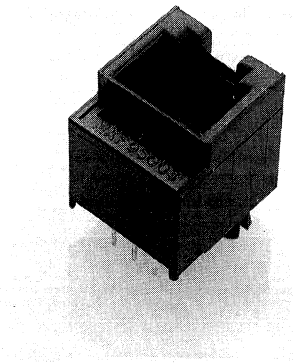
Specifications:

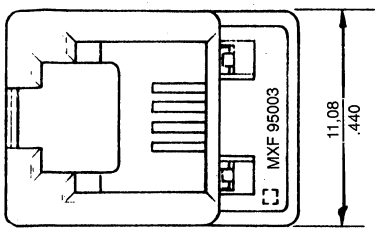
Housing: Black polyester UL 94V-O

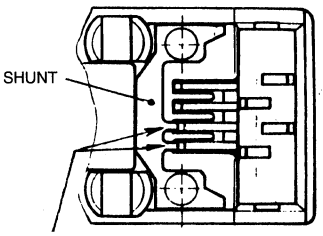
Contact Material: Phosphor Bronze

Plating:

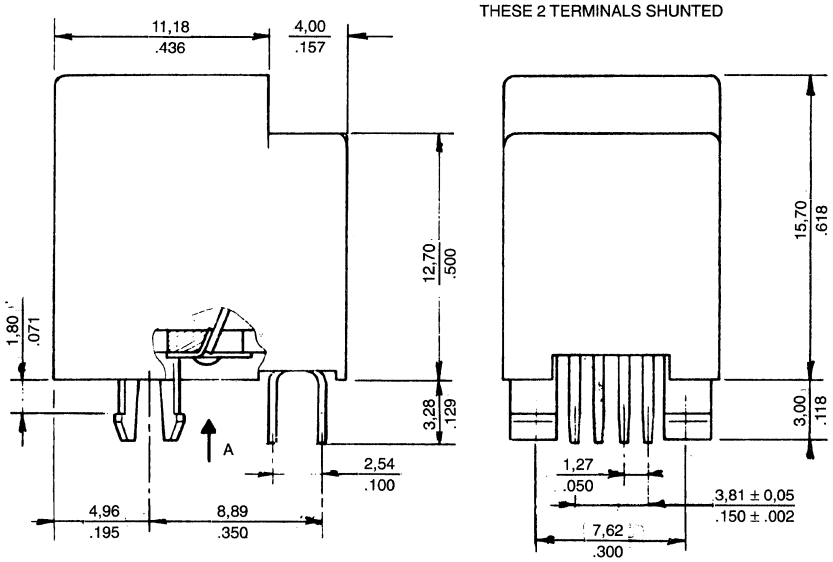
Plating 2: Post plate 1,27-1,52µm/50-60µinch gold in contact area, 1,90µm/75µinch min. (90/10) tin/lead in tail area both over 1,27µm/50µinch min. nickel overall



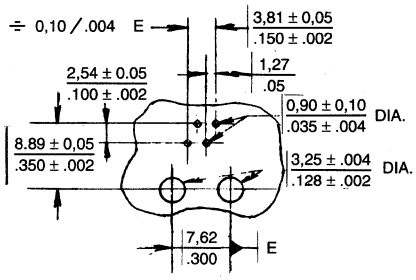




THESE 2 TERMINALS SHUNTED



FOR STANDARD JACK
(Through hole version)



Ordering Information and Dimensions

Cts	Loaded Contacts	Order No.	Shunt Position 1 2 3 4
4	4	95033-2001	X X

Low Profile Right Angle Jack Shunt Version

95034 Series

- Mates with FCC-68 Plug
- High reliability, square contact
- Very low profile
- Industry standard footprint

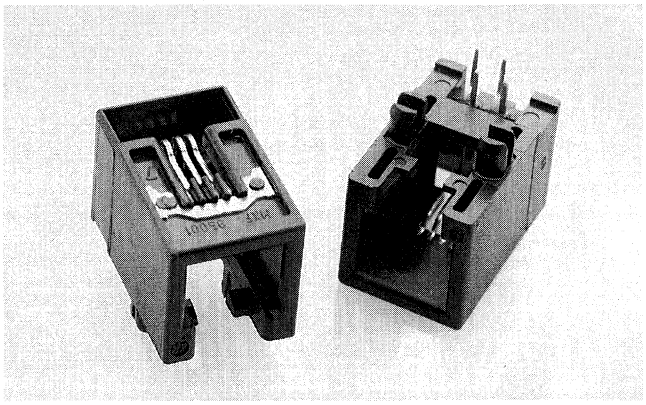
Specifications:

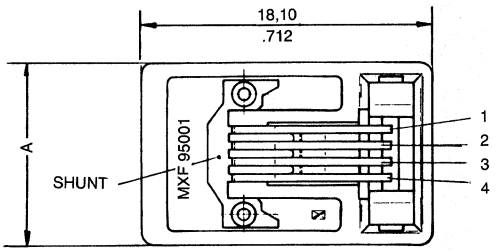
Housing: Black polyester UL 94V-O

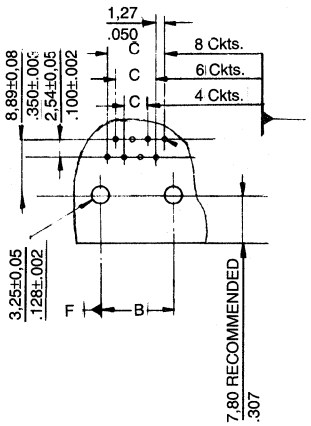
Contact Material: Phosphor Bronze

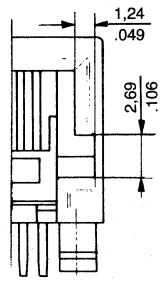
Plating:

Plating 2: Post plate 1,27-1,52µm/50-60µinch gold in contact area, 1,90µm/75µinch min. (90/10) tin/lead in tail area both over 1,27µm/50µinch min. nickel overall

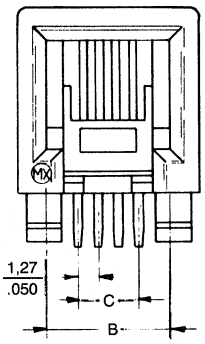


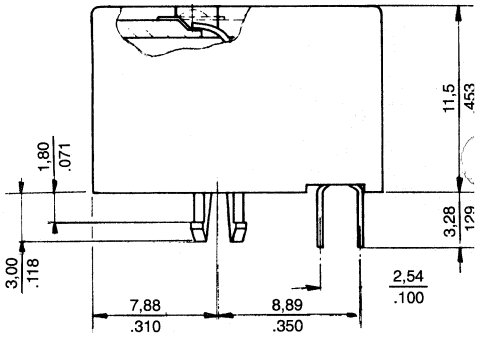






Optional Keying





Ordering Information and Dimensions

Cts	Loaded Contacts	Order No.	Shunt Position 1 2 3 4 5 6	Dim. A	Dim. B	Dim. C
4	4	95034-2003	x x x x	**11,18** .440	**7,62** .300	**3,81** .150
6	6	95034-2001	x x	**13,21** .520	**10,16** .400	**6,35** .250

Standard Profile Top Entry Jack

95022 Series

- Mates with FCC-68 Plug
- High reliability, square contact
- Industry standard footprint and height

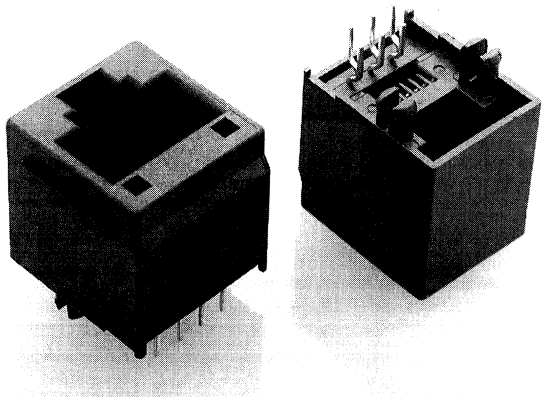
Specifications:

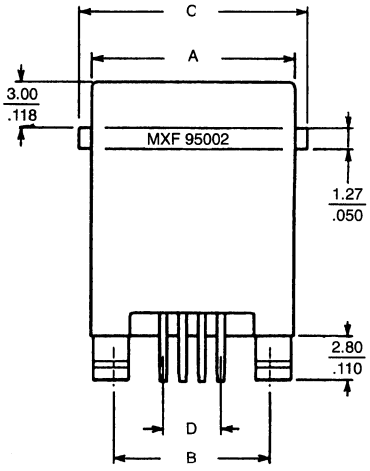
Housing: Black polyester UL 94V-O

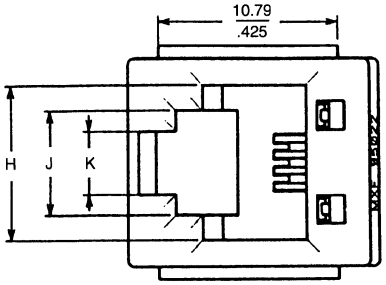
Contact Material: Phosphor Bronze

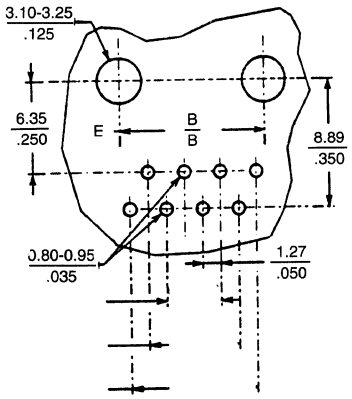
Plating:

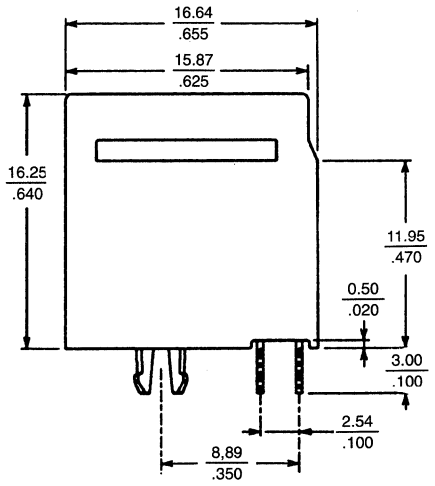
Plating 2: Post plate 1,27-1,52µm/50-60µinch gold in contact area, 1,90µm/75µinch min. (90/10) tin/lead in tail area both over 1,27µm/50µinch min. nickel overall











Ordering Information and Dimensions

Cts	Loaded Contacts	Order No.	Platings	Dim. A	Dim. B	Dim. C	Dim. D
4	4	95022-2447	2	**11,18** .440	**7,62** .300	**13,60** .535	**3,81** .150
6	4	95022-2647	2	**13,21** .520	**10,16** .400	**14,90** .587	**3,81** .150
6	6	95022-2687	2	**13,21** .520	**10,16** .400	**14,90** .587	**6,35** .250
8	6	95022-2867	2	**15,24** .600	**11,43** .450	**16,90** .665	**6,35** .250
8	8	95022-2887	2	**15,24** .600	**11,43** .450	**16,90** .665	**8,89** .350

Top Entry Telephone Jacks
Small Panel Cut Out

95003 Series

- Mates with FCC-68 Plug
- Industry compatible
- Automatic placement on PC boards possible
- CSA certified/UL listed
- Foot patterns identical to industry standard jacks
- High reliability, square contact

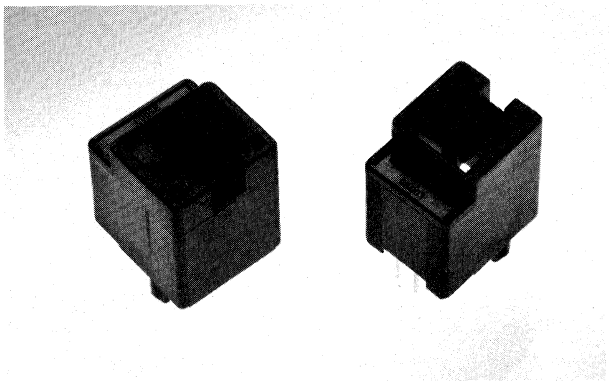
Specifications:

Housing: Black polyester UL 94V-O

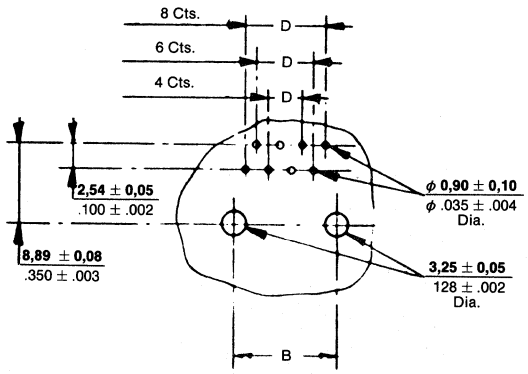
Contact Material: Phosphor Bronze

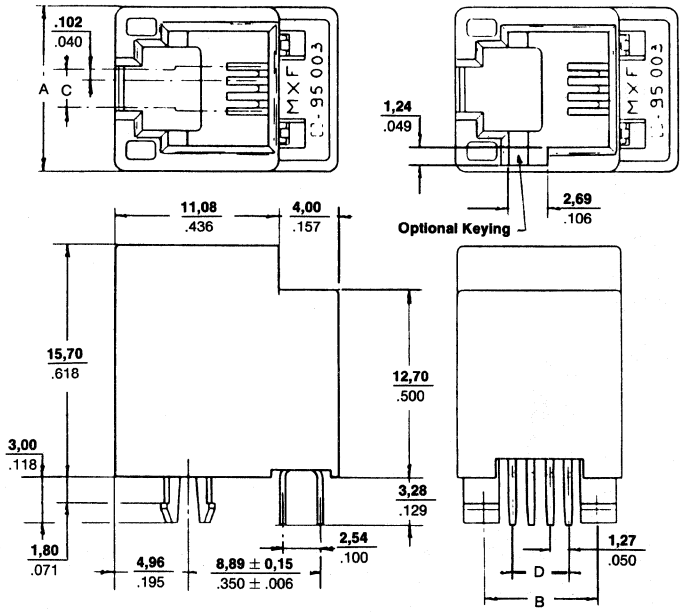
Plating:

Plating 2: Post plate 1,27-1,52µm/50-60µinch gold in contact area, 1,90µm/75µinch min. (90/10) tin/lead in tail area both over 1,27µm/50µinch min. nickel overall



P.C.B. Hole Layout
Seen from Component Side





Note: All dimensions are nominal unless otherwise stated.

Ordering Information and Dimensions

Cts	Loaded Contacts	Order No.	Platings	Key	Dim. A	Dim. B	Dim. C	Dim. D
4	4	•95003-2441	2	No	11,18 .440	7,62 .300	3,05 .120	3,81 .150
6	4	•95003-2641	2	No	13,21 .520	10,16 .400	3,05 .120	3,81 .150
6	6	•95003-2661	2	No	13,21 .520	10,16 .400	5,08 .200	6,35 .250
8	6	•95003-2861	2	No	15,24 .600	11,43 .450	5,08 .200	6,35 .250
8	8	•95003-2881	2	No	15,24 .600	11,43 .450	7,11 .280	8,89 .350
8	8	•95003-2882	2	Yes	15,24 .600	11,43 .450	7,11 .280	8,89 .350

Please contact factory for other plating options.
• U.S. Standard Product, available through Molex franchised distributors.

Top Entry Jack with Off Centered Latch Entry

95051 Series

- Mates with FCC-68 Plug
- High reliability, square contact
- Industry standard footprint

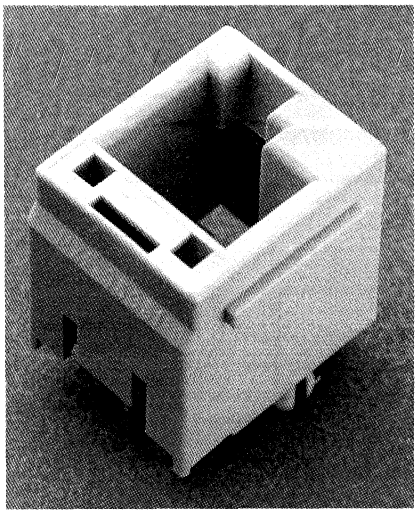
Specifications:

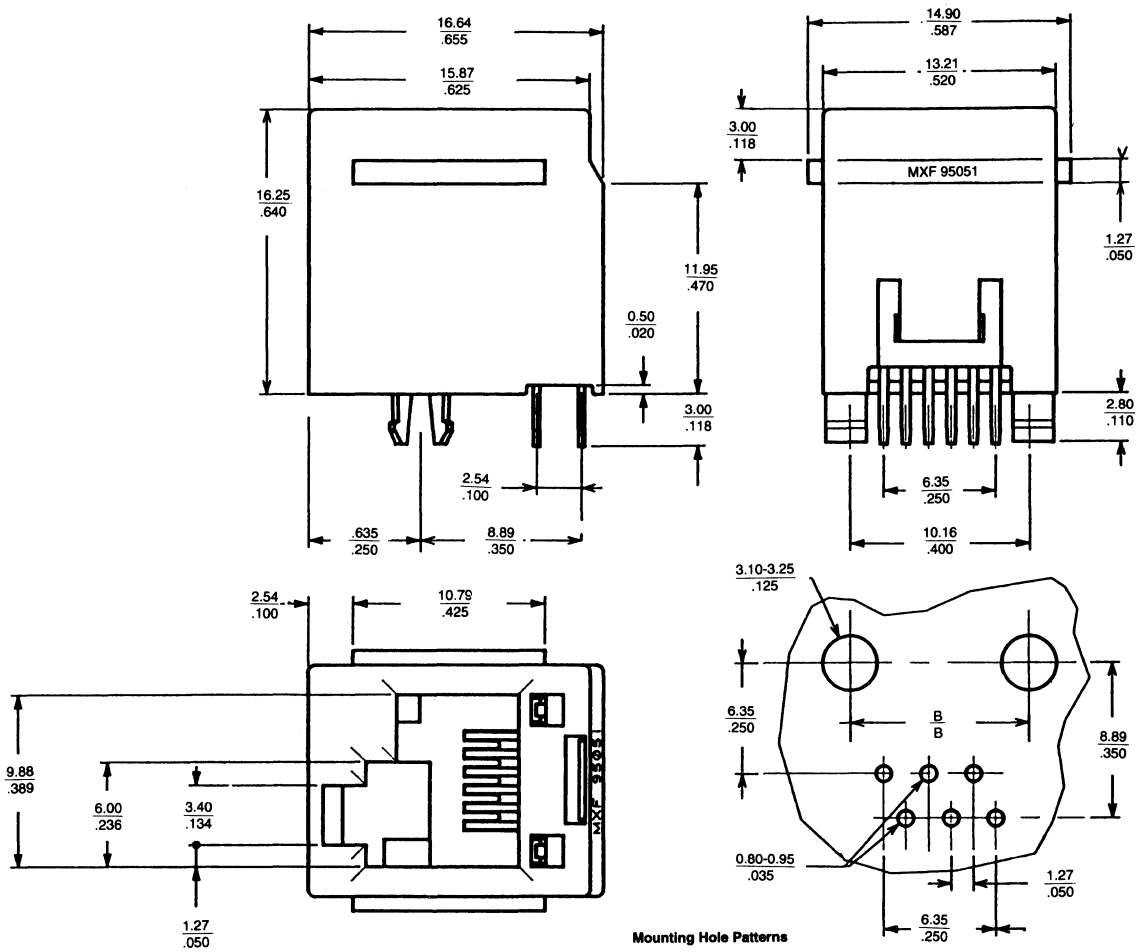
Housing: Light grey polyester UL 94V-O

Contact Material: Phosphor Bronze

Plating:

Plating 2: Post plate 1,27-1,52µm/50-60µinch gold in contact area, 1,90µm/75µinch min. (90/10) tin/lead in tail area both over 1,27µm/50µinch min. nickel overall





Mounting Hole Patterns

Ordering Information and Dimensions

Cts	Loaded Contacts	Order No.	Platings
6	6	•95051-2667	2

Top Entry Jack
Bottom Rib Version

95063 Series

- Mates with FCC-68 Plug
- High reliability, square contact
- Industry standard footprint

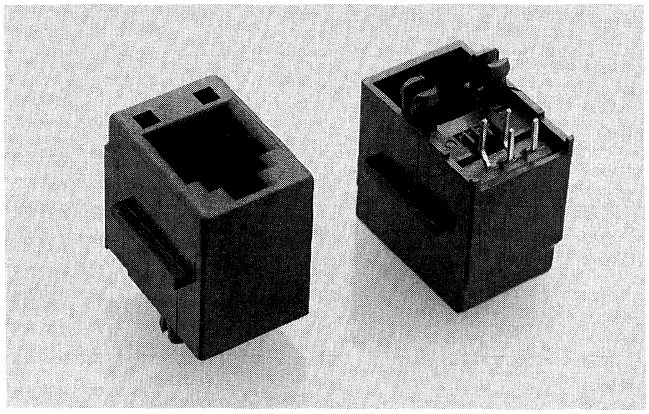
Specifications:

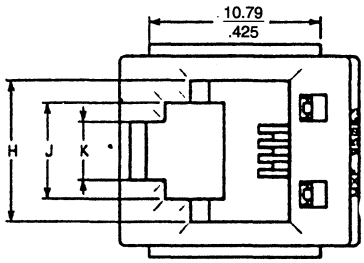
Housing: Black polyester UL 94V-O

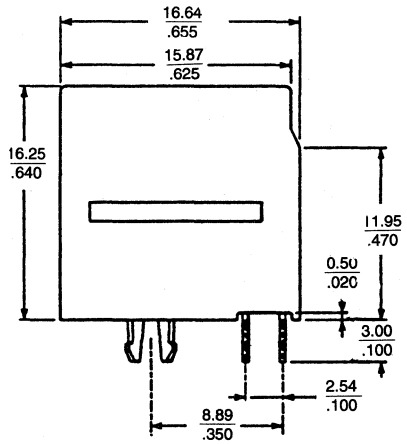
Contact Material: Phosphor Bronze

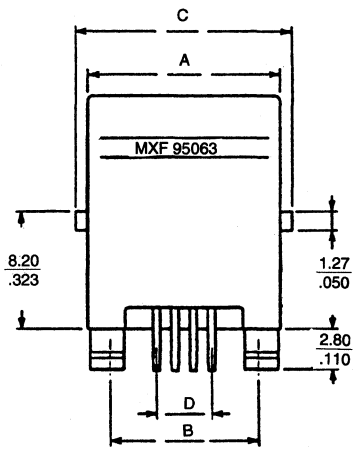
Plating:

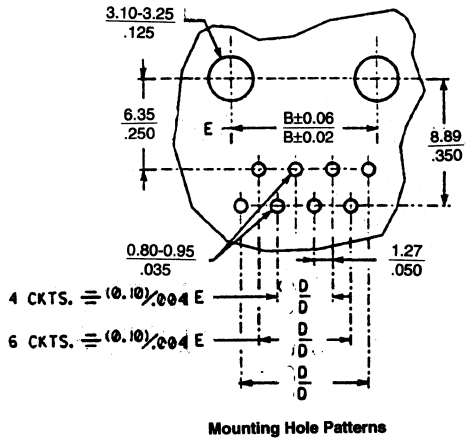
Plating 2: Post plate 1,27-1,52µm/50-60µinch gold in contact area, 1,90µm/75µinch min. (90/10) tin/lead in tail area both over 1,27µm/50µinch min. nickel overall











Mounting Hole Patterns

Ordering Information and Dimensions

Cts	Loaded Contacts	Order No.	Dim. A	Dim. B	Dim. C	Dim. D
4	4	95063-2447	11,18 .440	7,62 .350	13,60 .535	3,81 .150
6	4	95063-2647	13,21 .520	10,16 .400	14,90 .587	3,81 .150

Low Profile Jack Bottom Entry

95002 Series

- Mates with FCC-68 Plug
- Very low profile

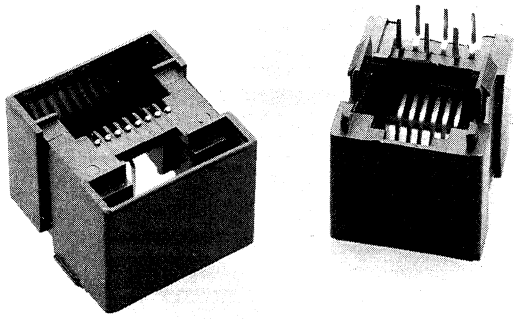
Specifications:

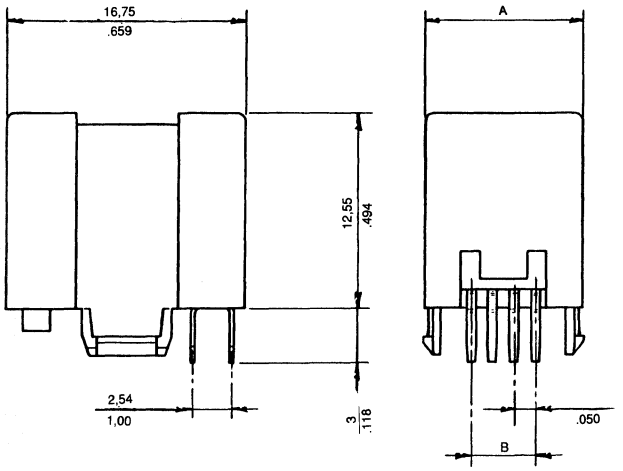
Housing: Black polyester, UL 94V-O

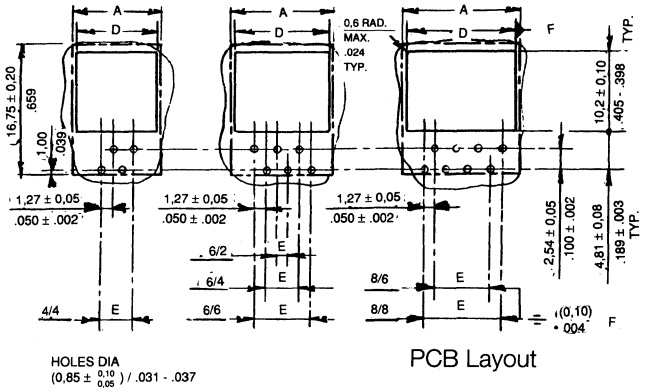
Contact Material: Phosphor Bronze

Plating:

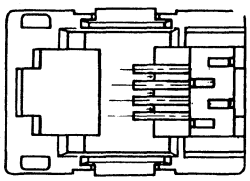
Plating 2: Post plate 1,27-1,52µm/50-60µinch gold in contact area, 1,90µm/75µinch min. (90/10) tin/lead in tail area both over 1,27µm/50µinch min. nickel overall







PCB Layout



Ordering Information and Dimensions

Cts	Loaded Contacts	Order No.	Platings	Dim. A	Dim. B	Dim. D	Dim. E
4	4	95002-2441	2	**11,40** .449	**3,81** .150	**10,20** .403 .398	**3,81** .150
6	2	95002-2621	2	**13,43** .529	**1,27** .050	**12,20** .482 .476	**1,27** .050
6	4	95002-2641	2	**13,43** .529	**3,81** .150	**12,20** .482 .476	**3,81** .150
6	6	95002-2661	2	**13,43** .529	**6,35** .250	**12,20** .482 .476	**6,35** .250
8	6	95002-2861	2	**15,46** .609	**6,35** .250	**14,20** .561 .555	**6,35** .250
8	8	95002-2881	2	**15,46** .609	**8,89** .350	**14,20** .561 .555	**8,89** .350

IDT™ Low Profile Jacks

90133 Series

- One piece construction
- Low profile - recommended for applications in handsets
- Front part may be adapted to customer specifications
- Active part of contact gold plated-tin in IDT area
- Available in loose or strip form for high volume applications
- Uses insulation displacement technology for mass termination

Specifications:

Housing: Black polyester UL 94V-O

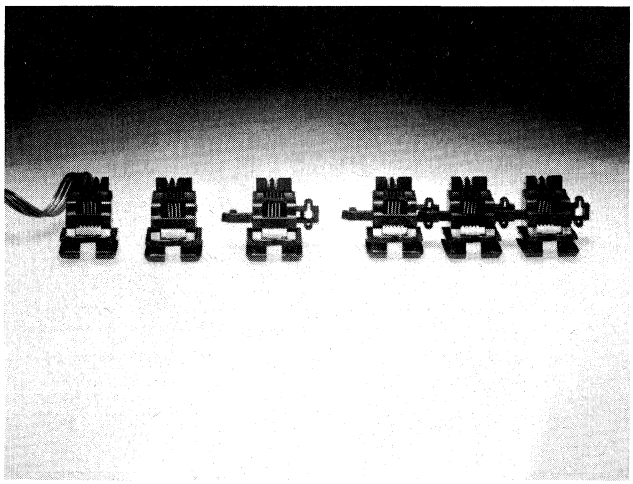
Contact Material: Phosphor Bronze

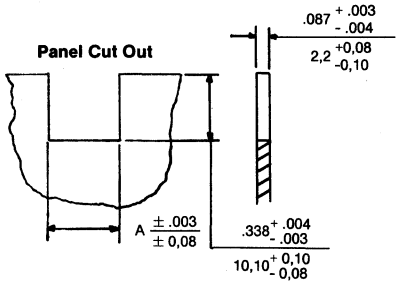
Plating: ID area plated with 1,27 µm/50 µinch min. electro tin over 1,27 µm/50 µinch min. nickel overall. Area of contact with retainer 1,27 µm/50 µinch min. gold in contact area over 1,27 µm/50 µinch min. nickel overall

Wire: Intended to terminate 26 AWG stranded top-coated wire and solid wire or 24 AWG stranded wire

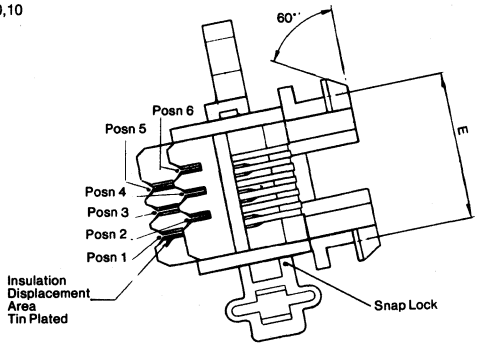
Product Spec: PSX 90133-E

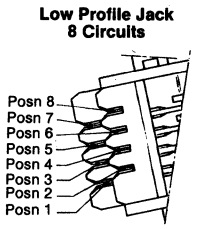
Application Spec: ASX 90133-E

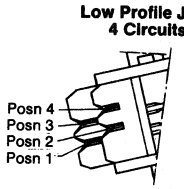


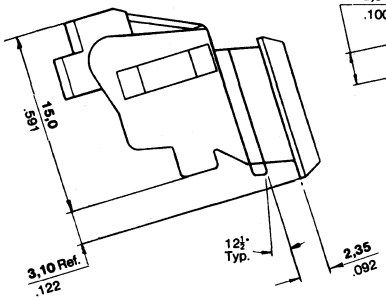


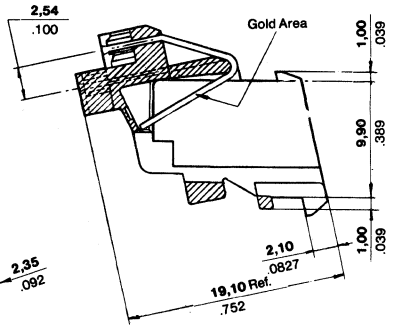
	4/4	6/6, 6/4	8/8, 8/6, 8/4
A	.414 10,52	.494 12,54	.574 14,56

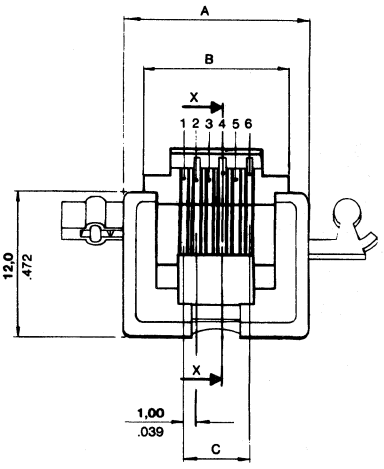












Section on X – X

Note: All dimensions are nominal unless otherwise stated.

Ordering Information and Dimensions

Cts	Loaded Contacts	Strip Mounted Order No.	Loose Pieces Order No.	Dim. A		B		C		E	
4	4	90133-0001	90133-7001	13,15	.518	10,20	.402	3,05	.120	10,35	.407
6	6	-0002	-7002	15,20	.600	12,20	.480	5,08	.200	12,35	.486
6	4	-0003	-7003	15,20	.600	12,20	.480	5,08	.200	12,35	.486
6	2	-0004	-7004	15,20	.600	12,20	.480	5,08	.200	12,35	.486
4	2	-0005	-7005	13,15	.518	10,20	.402	3,05	.120	10,35	.407
8	6	-0007	-7007	17,22	.678	14,22	.560	7,11	.280	14,38	.566
8	8	90133-0006	90133-7006	17,22	.678	14,22	.678	7,11	.280	14,38	.566

623K Telephone Jacks

90319 Series

- Mates with WE-type 6 position plug
- Conforms to 623K industry standard
- Available with 2, 4 or 6 positions loaded
- Selective gold plating
- Delivered with wires pre-assembled to housing
- UL recognized, CSA certified

Specifications:

Housing: Grey ABS UL 94V-O

Contact Material: Phosphor Bronze

Plating:

Plating 1: 1,27µm/50µinch gold over 1,27µm/50µinch nickel

Plating 2: 0,76µm/30µinch gold over 1,27µm/50µinch nickel

Plating 3: 0,27µm/5 microinches min. gold over 1,27µm/50 microinches nickel

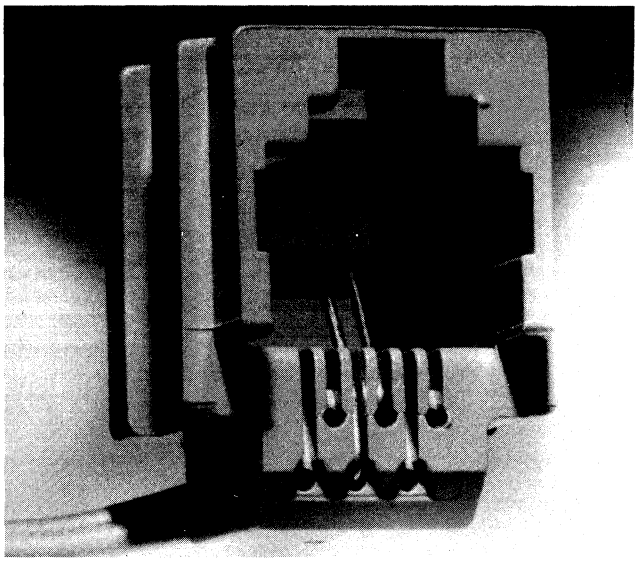
Wires: 26 AWG stranded

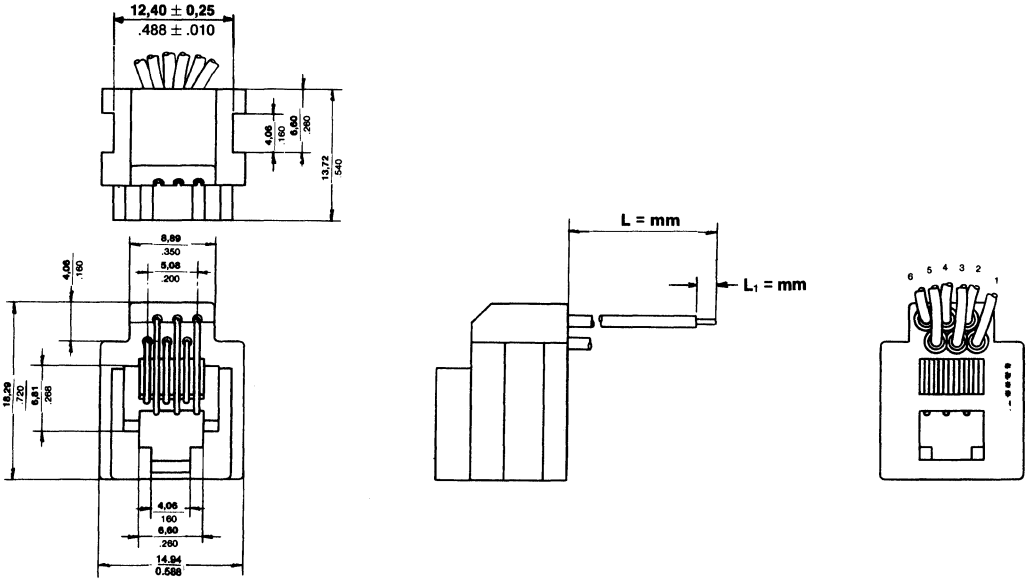
Contact Resistance: 20 milliohms at 2A

Insulation Resistance: 10 megohms at 500V DC

Current Rating: 2A DC

Withstanding Voltage: 1000V DC r.m.s. for 1 minute





Note: All dimensions are nominal unless otherwise stated.

Ordering Information and Dimensions

Order No.	Plating No.	Length L = mm	Strip Length L_1 = mm	Color CKT. 1 to 6	Color of Jack
90319-0001	1	80	10	4 Void, yellow, green, red, black, void	Grey
90319-0033	2	80	10	6 Blue black, red, green, yellow, white	Grey
90319-0022	3	80	10	2 Void, void, green, red, void, void	Grey

Other versions are available, contact factory

623P-Type Telephone Jack

95016 Series

- One piece construction
- For use with 6/2, 6/4 and 6/6 FCC-68 plug
- Complies with industry standard
- UL recognized, CSA certified

Specifications:

Housing: Grey ABS UL 94V-0

Contact Material: Phosphor Bronze

Wire: 26 AWG

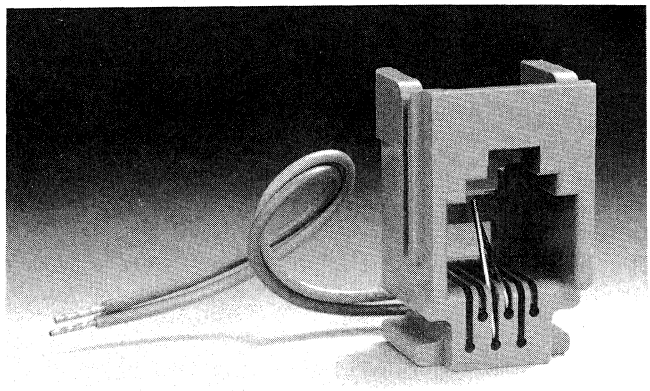
Plating:

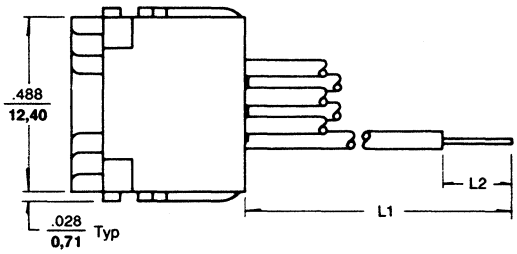
Plating 1: 50µin/1.27µm min. hard gold in contact area

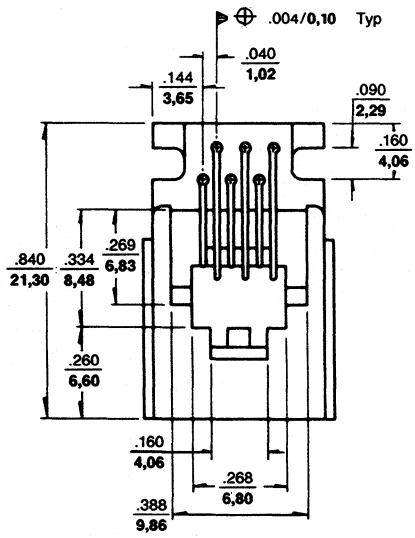
Plating 2: 30µin.0.76µm min. hard gold in contact area

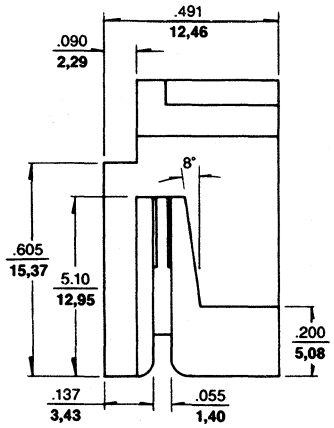
Plating 3: 15µin/0.38µm min. hard gold in contact area

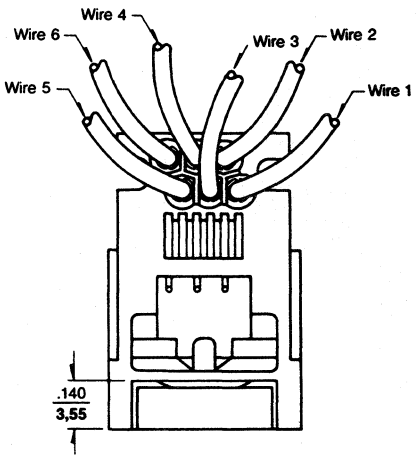
Note: All options have 100µin/2.54µm min. nickel overall











inch
mm

Ordering Information and Dimensions

Order No.	L1	L2	Wire 1	Wire 2	Wire 3	Wire 4	Wire 5	Wire 6	No. of Wire
95016-0001	4.13 **105,00**	.197±.02 **5,00±0,5**	Blue	Yellow	Green	Red	Black	White	6
95016-0002	2.38 **60,45**	.193±.02 **4,9±0,5**	—	—	Green	Red	—	—	2

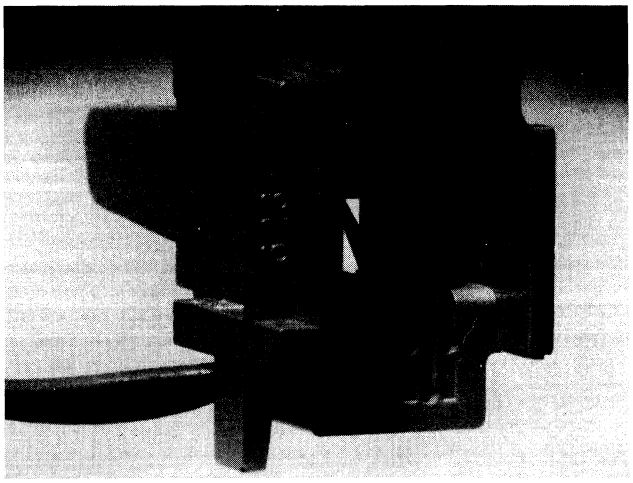
623T-4 Type Telephone Jacks

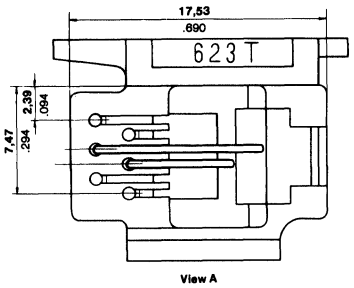
96701 Series

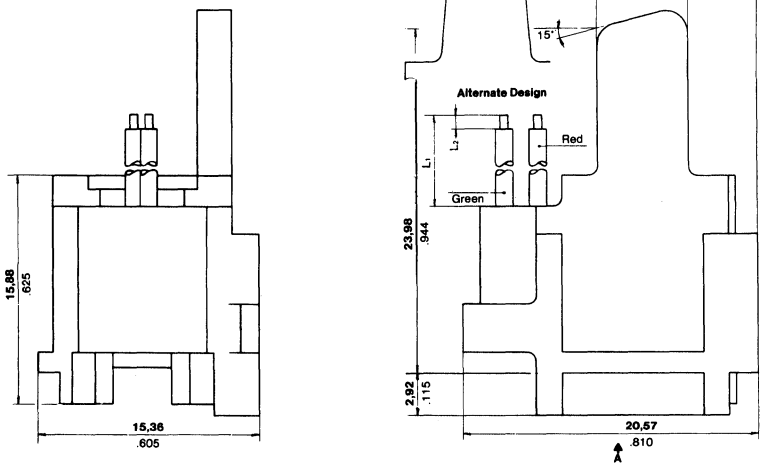
- Mates with WE-type 6 position plug
- Conforms to 623T industry standard
- Available with 2, 4 or 6 positions loaded
- Full gold plating
- Delivered with wires pre-assembled to housing
- Customer specified wire lengths and colors available
- UL recognized, CSA certified

Specifications:

Housing: Grey ABS UL 94V-0
Contact Material: Phosphor Bronze
Platings: 1.27µm/50 µinch gold over 2,54 µm/100 µinch nickel. Other platings, contact factory
Wires: 26 AWG stranded
Current Rating: 2A DC
Contact Resistance: 20 milliohms at 2A
Insulation Resistance: 10 megohms at 500V DC
Withstanding Voltage: 1000V DC r.m.s. for 1 minute







Note: All dimensions are nominal unless otherwise stated.

Ordering Information and Dimensions

Order No.	Wire	L_1 = mm		L_1 = mm	
96701-0001	Red	**186**	7.323	**5**	.197
	Green	**288**	11.339	**5**	.197

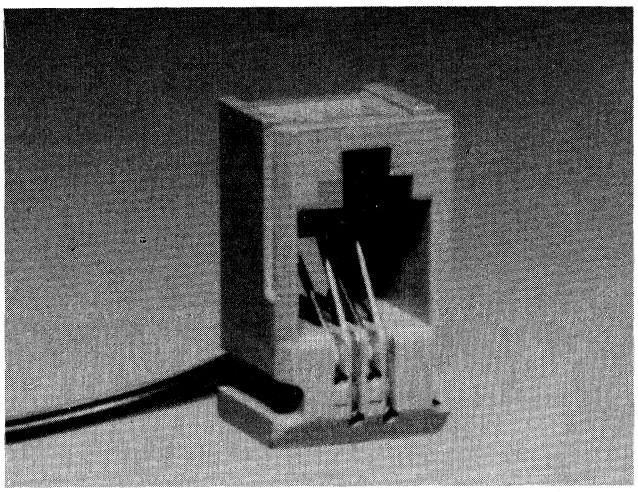
616L-Type Telephone Jacks

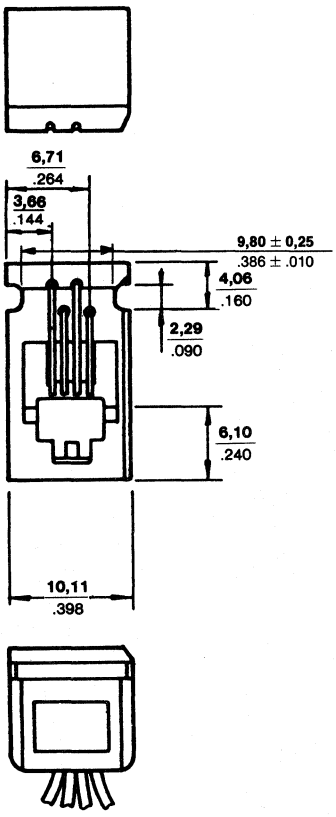
96702 Series

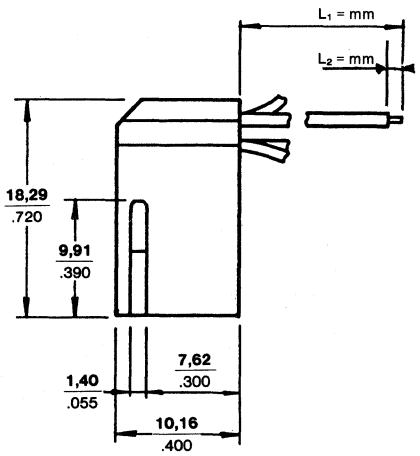
- Mates with WE-type plugs
- Conforms to 616L industry standard
- Available with 2 or 4 positions loaded
- Delivered with wires pre-assembled to housing
- UL recognized, CSA certified

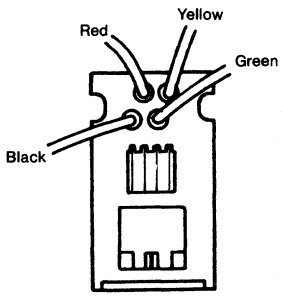
Specifications:

Housing: Grey ABS UL 94V-0
Contact Material: Phosphor Bronze
Platings: 1.27µm/50 µinch gold over 2,54 µm/100 µinch nickel. Other platings, contact factory
Wires: 26 AWG stranded
Current Rating: 2A DC
Contact Resistance: 20 milliohms at 2A
Insulation Resistance: 10 megohms at 500V DC
Withstanding Voltage: 1000V DC r.m.s. for 1 minute









Note: All dimensions are nominal unless otherwise stated.

Ordering Information and Dimensions

Order No.	Wire Color	L_1 = mm		L_2 = mm	
96702-0001	Yellow	**178**	7.008	**3,18**	.125
	Green	**288**	11.339	**5**	.197
	Red	**186**	7.323	**5**	.197
	Black	**178**	7.008	**3,18**	.125

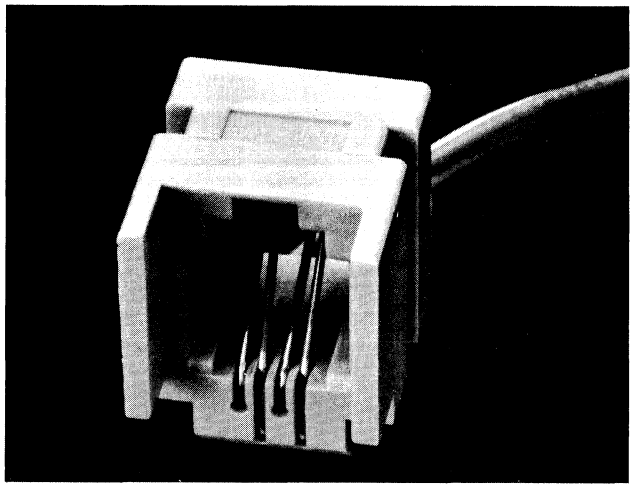
616M-Type Telephone Jacks

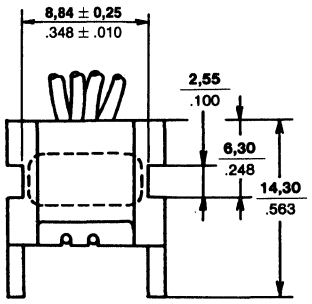
96703 Series

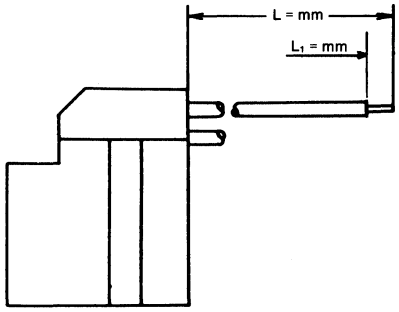
- Mates with WE-type plugs
- Conforms to 616M industry standard
- Available with 2 or 4 positions loaded
- Delivered with wires pre-assembled to housing
- UL recognized, CSA certified

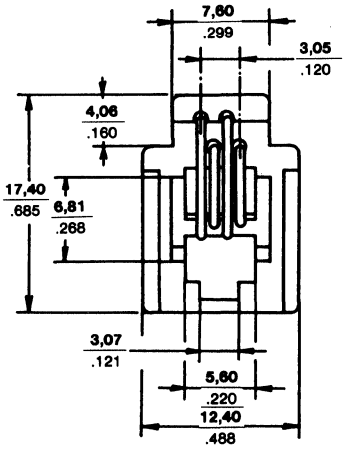
Specifications:

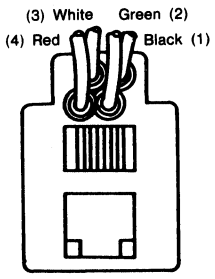
Housing: Grey ABS UL 94V-0
Contact Material: Phosphor Bronze
Platings: 1.27µm/50 µinch gold over 1,27 µm/50 µinch nickel. Other platings, contact factory
Wire: UL 1061 AWG 26 or OS-1
Current Rating: 2A DC
Contact Resistance: 20 milliohms at 2A
Insulation Resistance: 10 megohms at 500V DC
Withstanding Voltage: 1000V DC r.m.s. for 1 minute











Note: All dimensions are nominal unless otherwise stated.

Ordering Information and Dimensions

Order No.	L = mm		L_1 = mm		No. of Wires	Wire Color	
96703-0001	**75**	2.952	**10**	.394	4	(1) Black (3) White	(2) Green (4) Red
96703-0002	**75**	2.952	**10**	.394	2	(1) Void (3) White	(2) Green (1) Void
96703-0003	**100**	3.94	**5**	.197	4	(1) Black (3) White	(2) Green (4) Red
96703-0004	**80**	3.15	**2.5**	.098	2	(1) Void (3) Red	(2) Green (4) Void
96703-0005	**305**	12	**2.5**	.098	2	(1) Void (3) Red	(2) Green (4) Void

616P-Type Telephone Jacks

87032 Series

- Mates with WE-type plugs
- Conforms to 616P industry standard
- Available with 2 or 4 positions loaded
- Delivered with wires preassembled to housing
- UL recognized, CSA certified

Specifications:

Housing: ABS, UL 94-V0, grey

Contact Material: Phosphor bronze

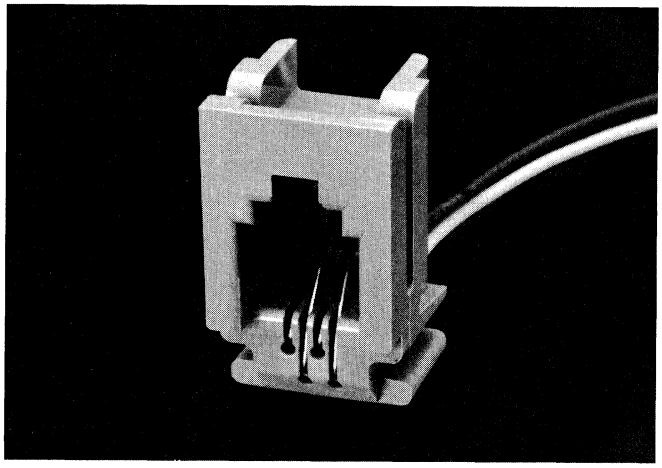
Plating: Post plate (1,27 µm) 50 µinch min. gold in contact area. (1,27 µm) 50 µinch min. tin/lead in tail area over (1,27 µm) 50 µinch min. nickel overall.

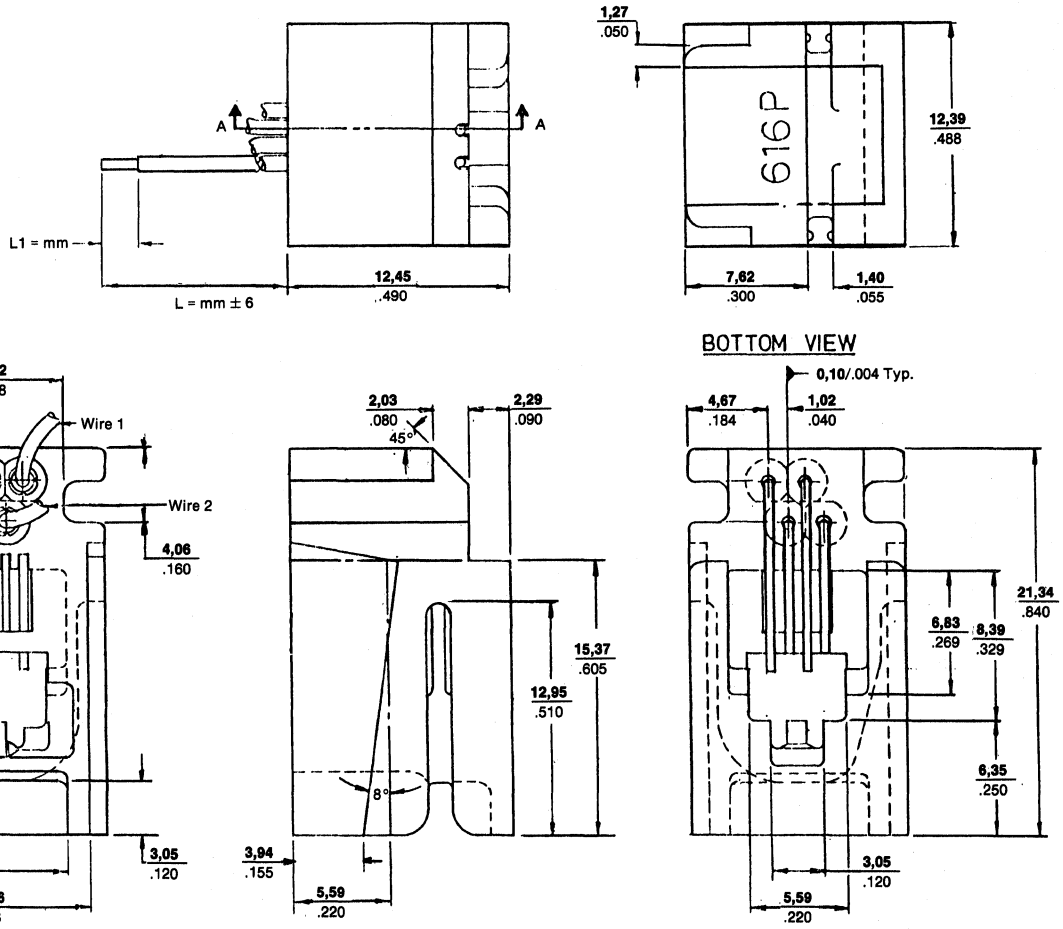
Wire: 26 AWG, stranded or OS-1

Current Rating: 1.2A DC

Contact Resistance: 20 milliohms

Withstanding Voltage: 1000V DC r.m.s. for 1 minute





Note: All dimensions are nominal unless otherwise stated.

Ordering Information and Dimensions

Order No.	No. of Wires	Wire 1	Wire 2	Wire 3	Wire 4	Wire Length L = mm	Wire Length L1 = mm	Color of Jack
87032-0001	4	Black	—	—	Red	245	5 ± .5	Grey
		—	Green	White	—	92	5 ± .5	

616W-Type Telephone Jacks

87033 Series

- Mates with WE-type plugs
- Conforms to 616W industry standard
- Available with 2 or 4 positions loaded
- Delivered with wires preassembled to housing
- UL recognized, CSA certified

Specifications:

Housing: Grey ABS UL 94V-0

Contact Material: Phosphor bronze

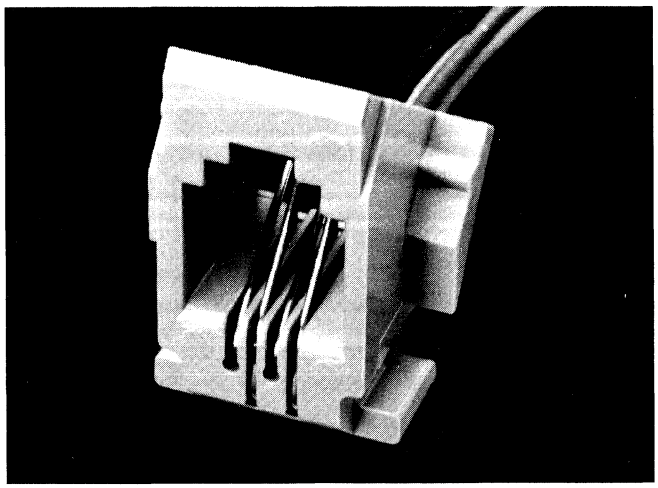
Plating: Post plate 1,27 µm 50 µinch min. gold in contact area. 1,27 µm 50 µinch min. tin/lead in tail area over 1,27 µm 50 µinch min. nickel overall.

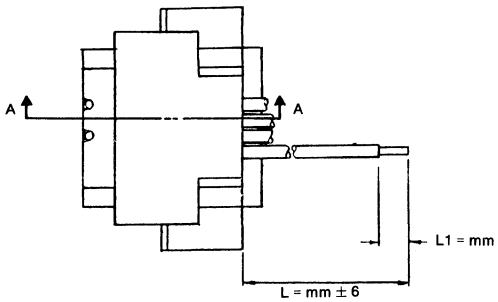
Wire: 26 AWG, stranded or OS-1

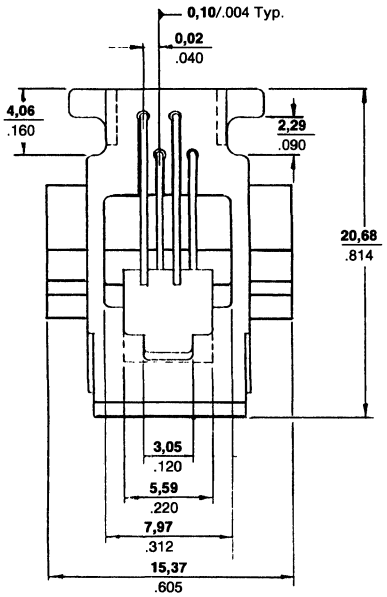
Current Rating: 1.2A DC

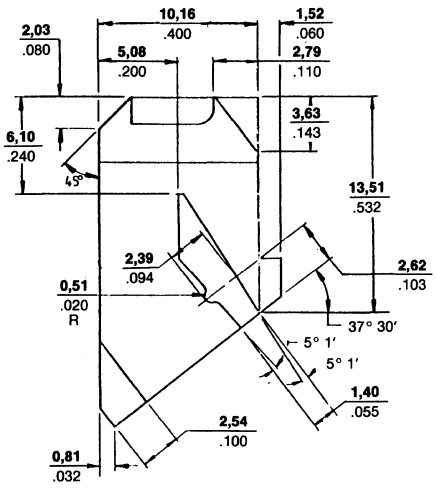
Contact Resistance: 20 milliohms

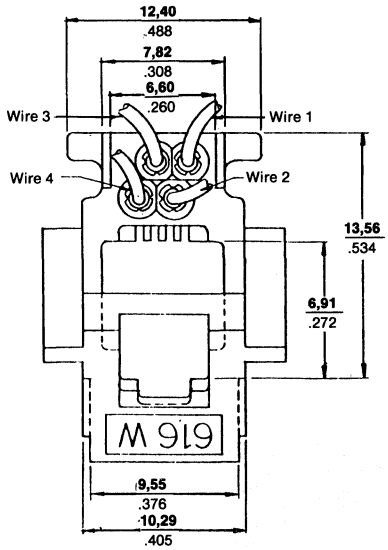
Withstanding Voltage: 1000V DC r.m.s. for 1 minute











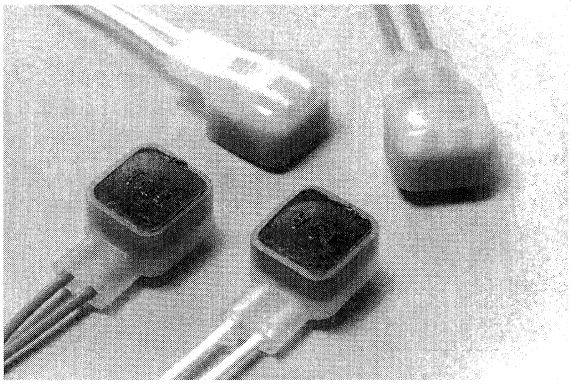
Note: All dimensions are nominal unless otherwise stated.

Ordering Information and Dimensions

Order No.	No. of Wires	Wire 1	Wire 2	Wire 3	Wire 4	Wire Length		Color of Jack
						L = mm	L1 = mm	
87033-0001	4	Red	White	Green	Black	205	3.2 ± .5	Grey

Splice Connector

36065 Series
QSS — Quick Seal Splice



- Two IDT connections per wire
- "U" shaped IDT prevents overdistortion of large conductors while ensuring sufficient deformation of small conductors
- Silicone sealant prevents moisture from entering ports and damaging connection
- Crystal clear nylon 6/6 permits visual examination before and after closing
- Accepts all solid conductors from 0.4-0.63 mm diameter (22-26 AWG). Accepts a maximum OD of 1.3 mm (0.051 inches)

Specifications:

Insulator — Nylon 6/6, 94 V-2

Sealing Compound — Polymeric grease, drop point 75°C

Contact Finish — Tin plating

Contact Material — 70 copper/30 zinc cartridge brass

Electrical:

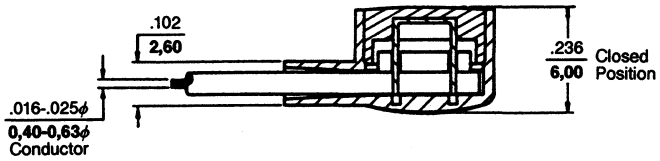
Current Capacity — 2 amps

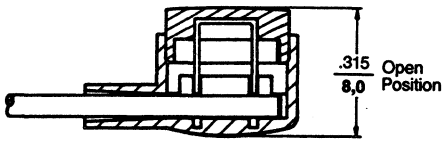
Dielectric Voltage — 2000 volts

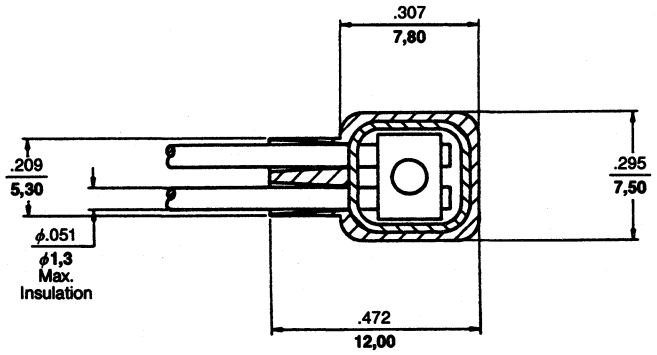
Operating Voltage — 250 volts

Contact Resistance — 5 milliohms

Insulation Resistance — 100 gigaohms at 500 volts







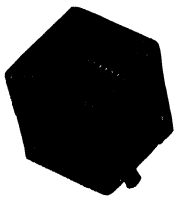
Ordering Information

Order No.	Ckt. Size	AWG	Plating
36065-2000	2	22-26	Tin

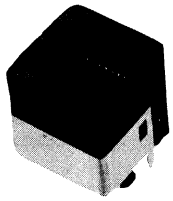
Vertical Modular Jacks

42410 Series

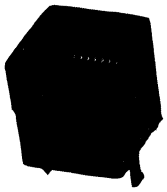
- UL File No.# E107635, CSA File No. #LR19980
- Meets UL1086 Section 8 Electrical Probe, and UL1863 Section 20 Childs Finger Test
- For mating with W.E. Co. and FCC 68 plugs
- Meets FCC Part 68 (when 50 µin gold specified)
- No exposed leads to meet British Telecom 4000 volt test
- Contact tips guided within FCC specified target zone-Positive alignment prevents shorting
- Every jack must pass on-line functional tests, including hi-pot and continuity
- All packaging anti-static treated
- Optional P.C. Clip Mount for added mechanical strength



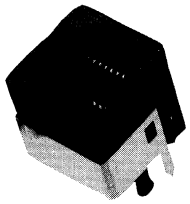
Flush Mount



Flush Mount with P.C. Clip Mount Option



Flangeless with RJ-45 Keying Option



Flangeless with P.C. Clip Mount Option

Specifications:

Electrical

Current Rating: 1.5 amperes

Dielectric Withstanding Voltage: 1000Vac rms 60Hz, 1min.

Insulation Resistance: 500 megohms min.

Durability: 500 mating cycles min.

Physical

Housing: Black, glass filled polyester,UL 94V-0

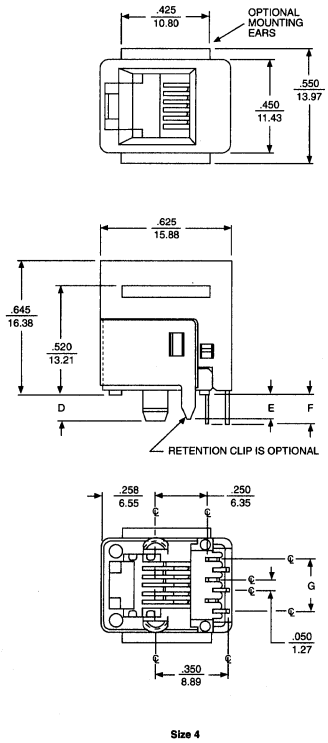
Contacts: Phosphor bronze

Duplex plating standard gold in contact area, tin lead on solder tails

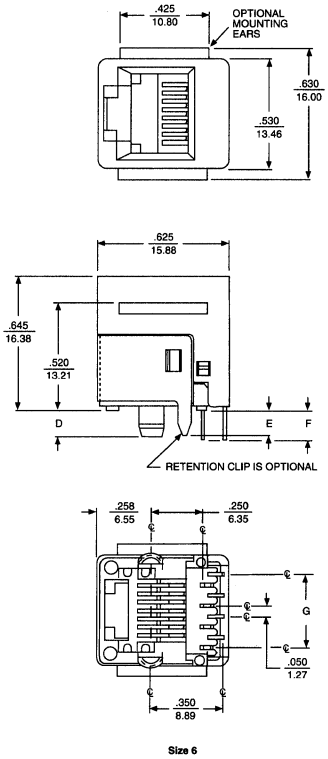
Reference Information

PCB Thickness: .062" or 1.25"

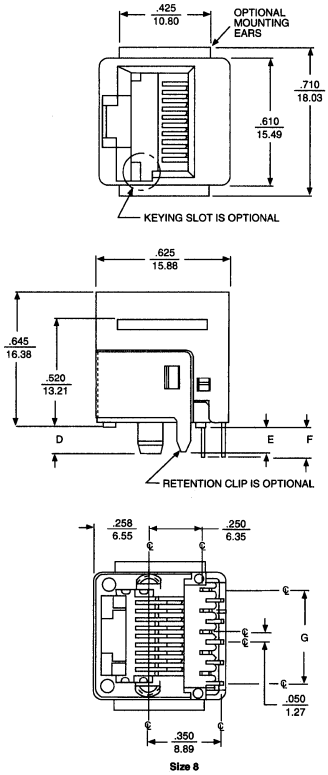
Product Specification: PS42410



Size 4



Size 6



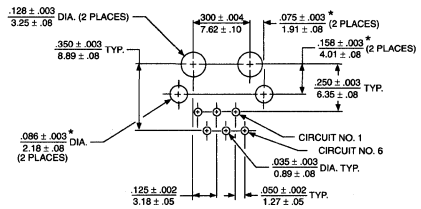
Size 8

Plating

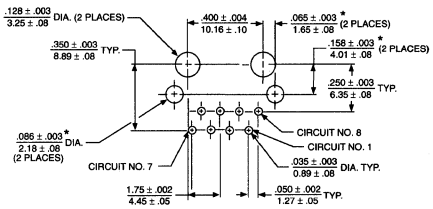
Type	Contact Area	PCB Tail	Underplate
1	50µ in Gold	50µ in Tin/Lead	50µ in Nickel
2	30µ in Gold	50µ in Tin/Lead	50µ in Nickel
3	15µ in Gold	50µ in Tin/Lead	50µ in Nickel

Vertical Modular Jacks

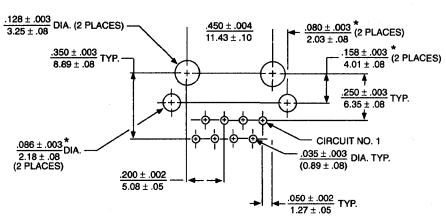
42410 Series



PCB Layout
Size 4



PCB Layout
Size 6



PCB Layout
Size 8

*** For Jacks with P.C. Clip Only**

Ordering Information Standard Modular Jacks for .062 P.C.B

Housing size	Loaded Contacts	Flush Mount without P.C. Clip	Flush Mount with P.C. Clip	Flangeless Mount without P.C. Clip	Flangeless Mount with P.C. Clip	Universal Service Order Code	Plating Type	Key Type	Dim. D	Dim. E	Dim. F	Dim. G
4	2	42410-4312	42410-4324	42410-4314	42410-4326		1	None	.128 3.25	.120 3.05	.120 3.05	.050 1.27
4	4	• 42410-4168	42410-4180	42410-4170	42410-4182		1	None	.128 3.25	.120 3.05	.120 3.05	.150 3.81
4	6	42410-4024	42410-4036	42410-4026	42410-4038		1	None	.128 3.25	.120 3.05	.120 3.05	.250 6.35
6	2	42410-6456	42410-6468	42410-6438	42410-6470		1	None	.128 3.25	.120 3.05	.120 3.05	.050 1.27
6	4	• 42410-6312	42410-6324	• 42410-6314	42410-6326	RJ11/RJ13/RJ14	1	None	.128 3.25	.120 3.05	.120 3.05	.150 3.81
6	6	• 42410-6168	42410-6180	• 42410-6170	42410-6182		1	None	.128 3.25	.120 3.05	.120 3.05	.250 6.25
6	8	42410-6024	42410-6036	42410-6026	42410-6038		1	None	.128 3.25	.120 3.05	.120 3.05	.350 8.89
8	2	42410-9176	42410-9188	42410-9178	42410-9190		1	None	.128 3.25	.120 3.05	.120 3.05	.050 1.27
8 Keyed	2	42410-9224	42410-9236	42410-9226	42410-9238		1	RJ45	.128 3.25	.120 3.05	.120 3.05	.050 1.27
8	4	42410-8888	42410-8900	42410-8890	42410-8902		1	None	.128 3.25	.120 3.05	.120 3.05	.150 3.81
8 Keyed	4	42410-8936	42410-8948	42410-8938	42410-8952		1	RJ45	.128 3.25	.120 3.05	.120 3.05	.150 3.81
8	6	• 42410-8600	42410-8612	42410-8602	42410-8614		1	None	.128 3.25	.120 3.05	.120 3.05	.250 6.35
8 Keyed	6	• 42410-8648	42410-8660	42410-8630	42410-8662		1	RJ45	.128 3.25	.120 3.05	.120 3.05	.250 6.35
8	8	• 42410-8312	42410-8324	42410-8314	42410-8326	RJ48	1	None	.128 3.25	.120 3.05	.120 3.05	.350 8.89
8 Keyed	8	• 42410-8360	42410-8372	42410-8362	42410-8374	RJ45	1	RJ45	.128 3.25	.120 3.05	.120 3.05	.350 8.89

• U.S. Standard Product, available through Molex franchised distributors.

Ordering Information Standard Modular Jacks for .125 P.C.B

Housing size	Loaded Contacts	Flush Mount without P.C. Clip	Flush Mount with P.C. Clip	Flangeless Mount without P.C. Clip	Flangeless Mount with P.C. Clip	Universal Service Order Code	Plating Type	Key Type	Dim. D	Dim. E	Dim. F	Dim. G
4	2	42410-4408	42410-4420	42410-4410	41410-4422		1	None	.191 4.85	.205 5.21	.205 5.21	.050 1.27
4	4	42410-4264	42410-4276	42410-4266	42410-4278		1	None	.191 4.85	.205 5.21	.205 5.21	.150 3.81
4	6	42410-4120	42410-4132	42410-4122	42410-4134		1	None	.191 4.85	.205 5.21	.205 5.21	.250 6.35
6	2	42410-6552	42410-6564	42410-6554	42410-6566		1	None	.191 4.85	.205 5.21	.205 5.21	.050 1.27
6	4	42410-6408	42410-6420	42410-6410	42410-6422	RJ11/RJ13/RJ14	1	None	.191 4.85	.205 5.21	.205 5.21	.150 3.81
6	6	42410-6264	42410-6276	42410-6266	42410-6278		1	None	.191 4.85	.205 5.21	.205 5.21	.250 6.25
6	8	42410-6120	42410-6132	42410-6122	42410-6134		1	None	.191 4.85	.205 5.21	.205 5.21	.350 8.89
8	2	42410-9368	42410-9380	42410-9370	42410-9382		1	None	.191 4.85	.205 5.21	.205 5.21	.050 1.27
8 Keyed	2	42410-9416	42410-9428	42410-9418	42410-9430		1	RJ45	.191 4.85	.205 5.21	.205 5.21	.050 1.27
8	4	42410-9080	42410-9092	42410-9082	42410-9094		1	None	.191 4.85	.205 5.21	.205 5.21	.150 3.81
8 Keyed	4	42410-9128	42410-9140	42410-9130	42410-9142		1	RJ45	.191 4.85	.205 5.21	.205 5.21	.150 3.81
8	6	42410-8792	42410-8804	42410-8794	42410-8806		1	None	.191 4.85	.205 5.21	.205 5.21	.250 6.35
8 Keyed	6	42410-8840	42410-8852	42410-8842	42410-8854		1	RJ45	.191 4.85	.205 5.21	.205 5.21	.250 6.35
8	8	42410-8504	42410-8516	42410-8506	42410-8518	RJ48	1	None	.191 4.85	.205 5.21	.205 5.21	.350 8.89
8 Keyed	8	42410-8552	42410-8564	42410-8554	42410-8566	RJ45	1	RJ45	.191 4.85	.205 5.21	.205 5.21	.350 8.89

DIN 41612 Connectors

Introduction

Molex's new series of DIN 41612 connectors offer features for a variety of data/telecom applications. The series includes industry standard dual and triple row receptacles, and headers in circuit sizes from 16 to 96.

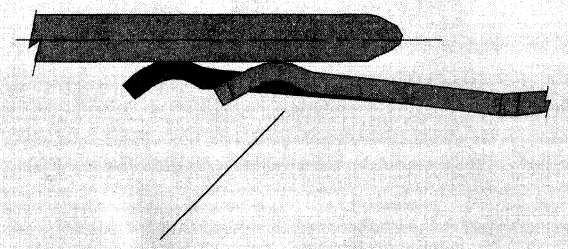
Receptacles feature a dual beam contact on a single side, offering low insertion force and reliable connection. Polarizing slots on all versions ensure proper connector orientation.

Headers may be ordered in edge mount style or in a face mount version used in wave soldering applications. Triple row headers and receptacles are available fully loaded or can be ordered with the middle row void.

All versions of the Molex DIN 41612 connectors are available in glass-filled polyester material with two plating options.

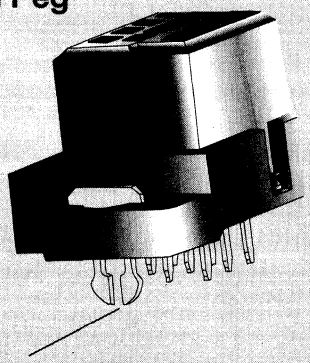
An optional metal hold-down provides secure PCB retention.

Contact Features



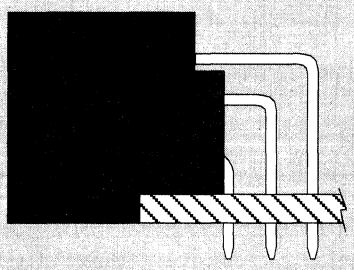
Two points of contact provide smooth insertion and reliable connection.

PCB Retention Peg

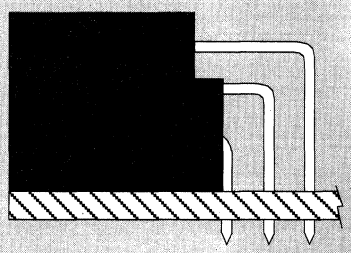


Optional metal hold-down provides secure retention during wave soldering.

Board Mounting Options



Edge-Mount Type

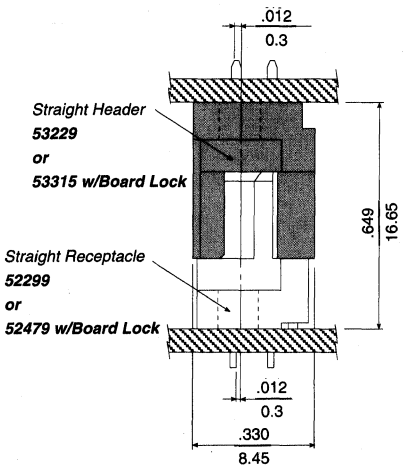
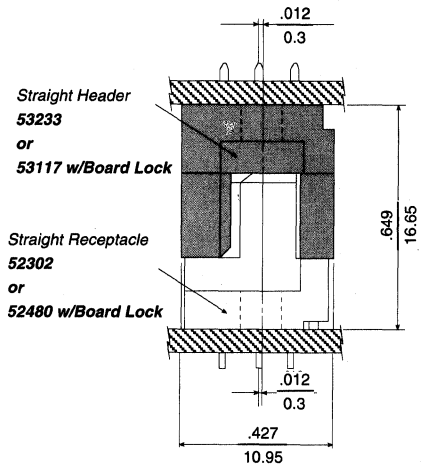
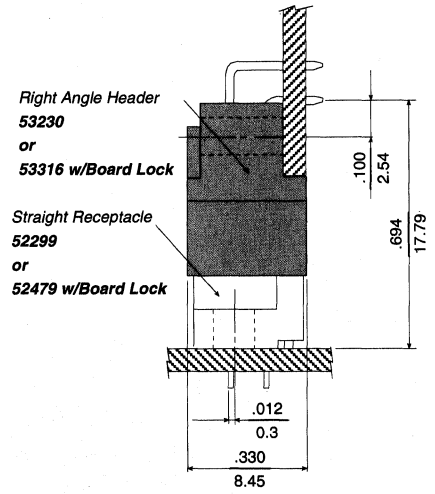
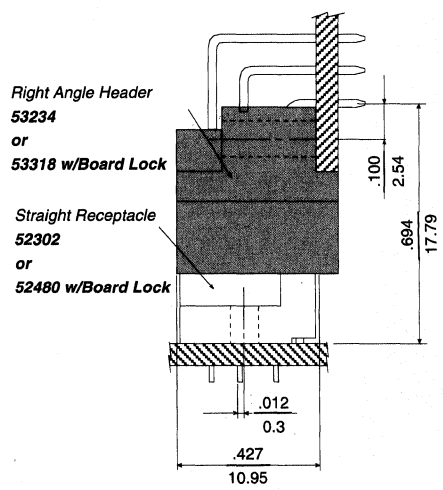
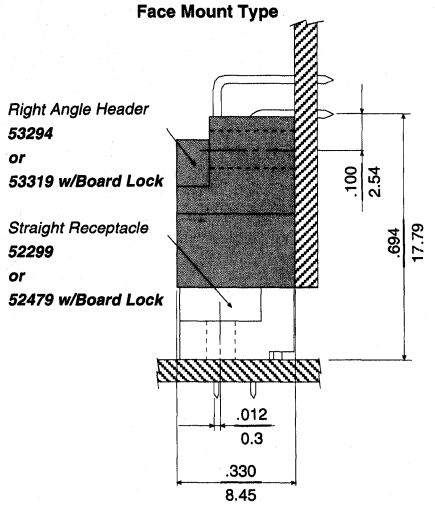
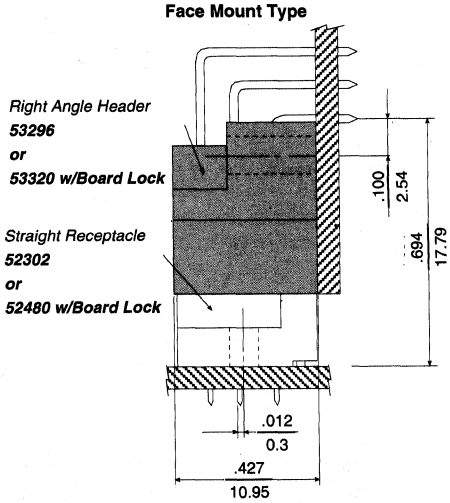


Face-Mount Type

Insulation Resistance: 10^6 mΩ min. (at DC 100V)
Dielectric Withstanding Voltage: AC 1000V DC applied between adjacent terminals.
Contact Resistance: 20 mΩ max. in dry circuit condition.
Rated Voltage: 300V
Rated Current: 2A

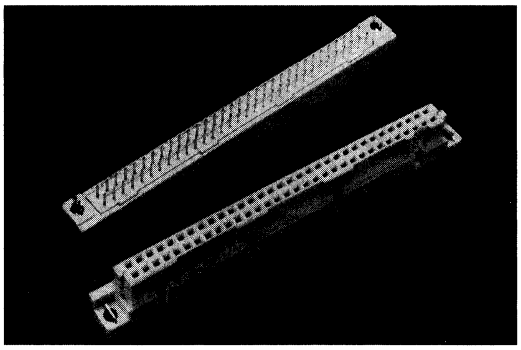
Mating Options

inch / mm

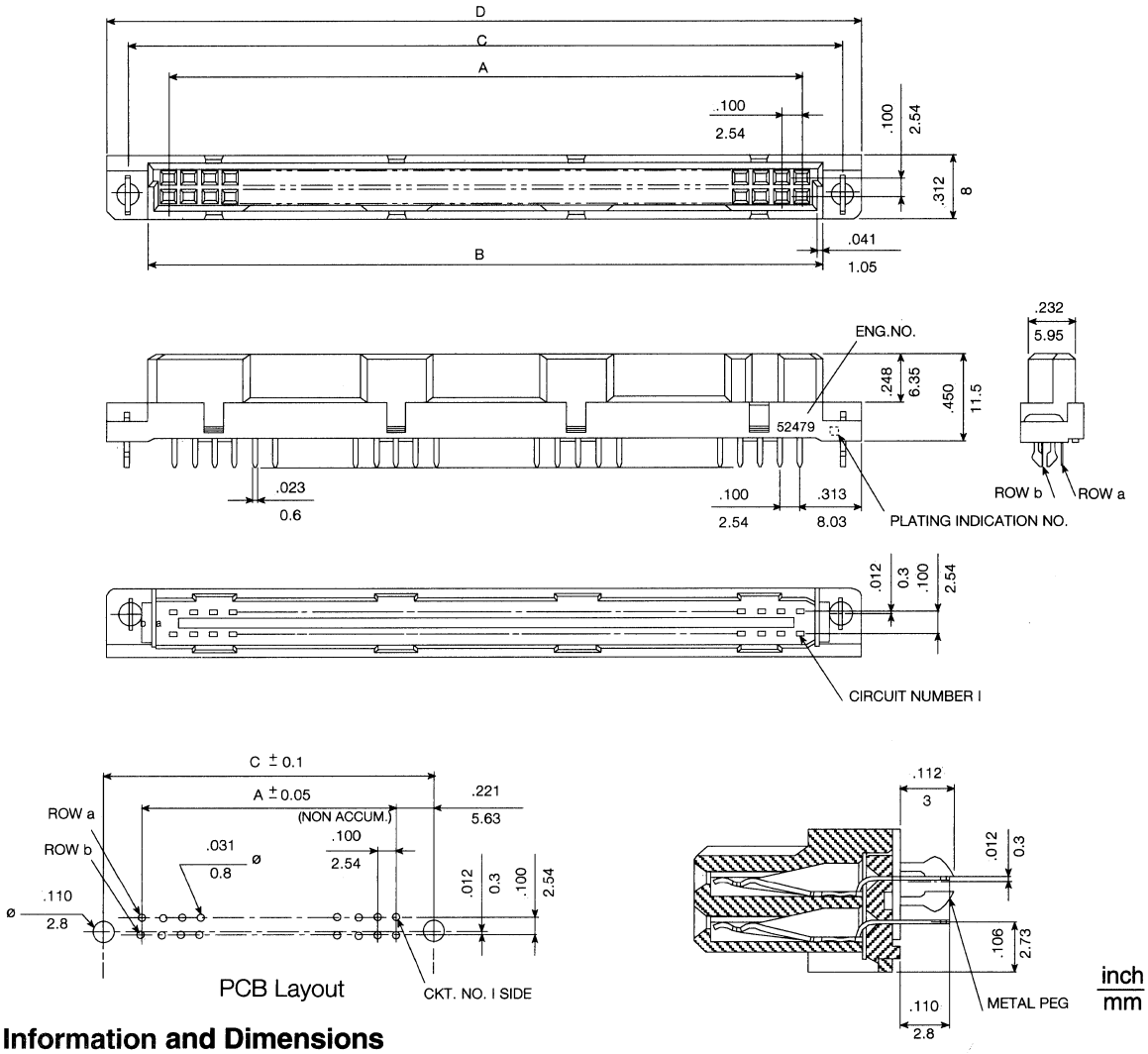
	Dual Row	Triple Row
Stacking		
Right Angle Edge Mount	**Edge Mount Type** 	**Edge Mount Type** 
Right Angle Face Mount	**Face Mount Type** 	**Face Mount Type** 

Dual Row DIN 41612 Connector

52299 Series (W/O Metal Peg)
52479 Series (Metal Peg)
Straight Receptacle



- 16-64 circuits
- Housing: Glass-filled P.B.T., UL 94V-0
- Terminal: Phosphor Bronze
- Metal peg: Phosphor Bronze
- Mates with: 53229, 53315, 53230
  53316, 53294, 53319 Series



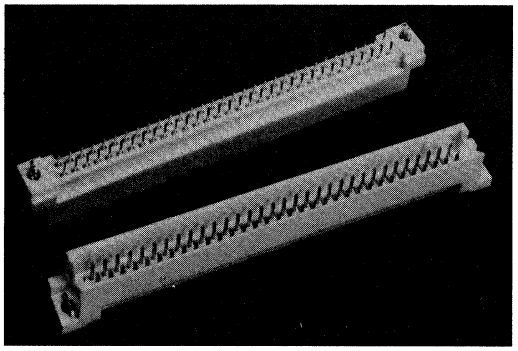
Ordering Information and Dimensions

Circuit Size	Order No.		Dim. A		Dim. B		Dim. C		Dim. D	
	W/O Metal Peg	With Metal Peg								
16	52299-016**X**	52479-016**X**	.700	17.78	.943	23.94	1.143	29.04	1.332	3.84
20	52299-020**X**	52479-020**X**	.900	22.86	1.143	29.02	1.343	34.12	1.532	38.92
32	52299-032**X**	52479-032**X**	1.500	38.10	1.743	44.26	1.943	49.36	2.132	54.16
44	52299-044**X**	52479-044**X**	2.100	53.34	2.343	59.50	2.543	64.60	2.732	69.40
50	52299-050**X**	52479-050**X**	2.400	60.96	2.643	67.12	2.843	72.22	3.032	77.02
64	52299-064**X**	52479-064**X**	3.100	78.74	3.343	84.90	3.543	90.00	3.732	94.80

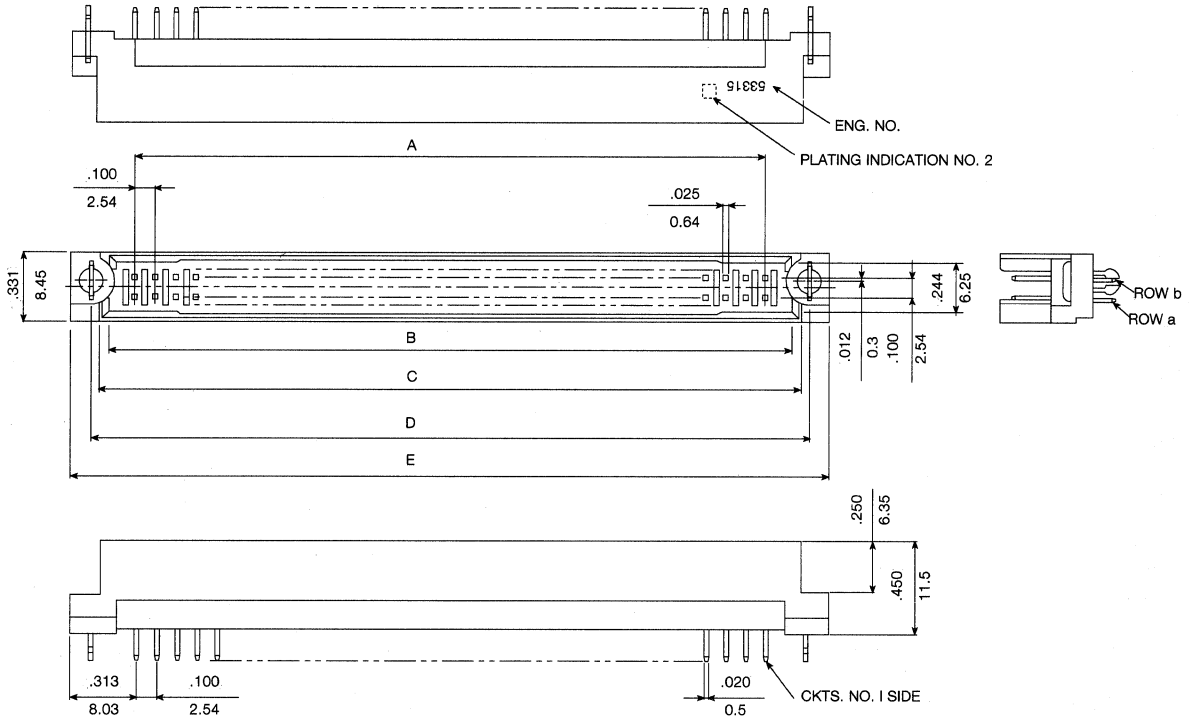
X = Plating code - Replace "**X**" in Order No. with "1" or "3". See below.
1 = 12µin gold with nickel underplate overall and tin/lead in solder area.
3 = 30µin gold with nickel underplate overall and tin/lead in solder area.

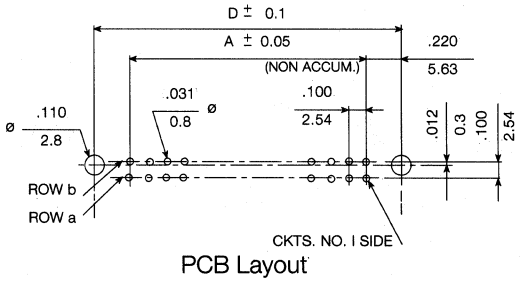
Dual Row DIN 41612 Connector

53229 Series (W/O Metal Peg)
53315 Series (Metal Peg)
Straight Header

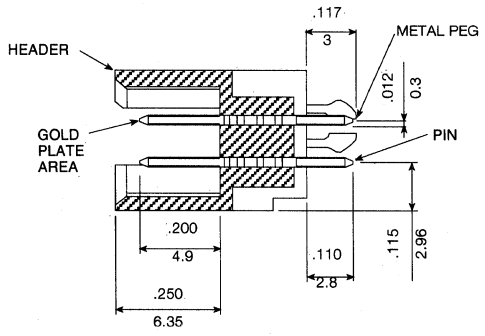


- 16-64 circuits
- Header: Glass-filled P.B.T., UL 94V-0
- Pin: Brass
- Metal Peg: Phosphor Bronze
- Mates with: 52299, 52479 Series





PCB Layout



inch / mm

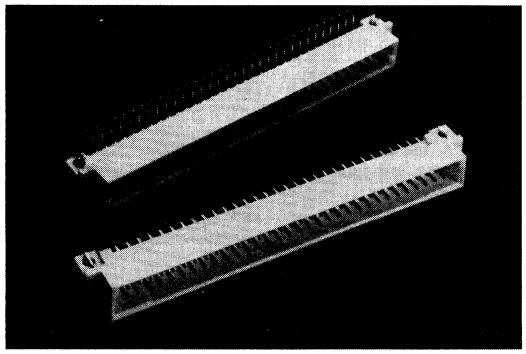
Ordering Information and Dimensions

Circuit Size	Order No.		Dim. A	Dim. B	Dim. C	Dim. D	Dim. E
	W/O Metal Peg	With Metal Peg					
16	53229-016X	53315-016X	.700 17.78	.960 24.34	1.057 26.84	1.143 29.04	1.332 33.84
20	53229-020X	53315-020X	.900 22.86	1.158 29.42	1.257 31.92	1.343 34.12	1.532 38.92
32	53229-032X	53315-032X	1.500 38.10	1.758 44.66	1.857 47.16	1.943 49.36	2.132 54.16
44	53229-044X	53315-044X	2.100 53.34	2.358 59.90	2.457 62.40	2.543 64.60	2.732 69.40
50	53229-050X	53315-050X	2.400 60.96	2.658 67.52	2.757 70.02	2.843 72.22	3.032 77.02
64	53229-064X	53315-064X	3.100 78.74	3.358 85.30	3.457 87.80	3.543 90.00	3.732 94.80

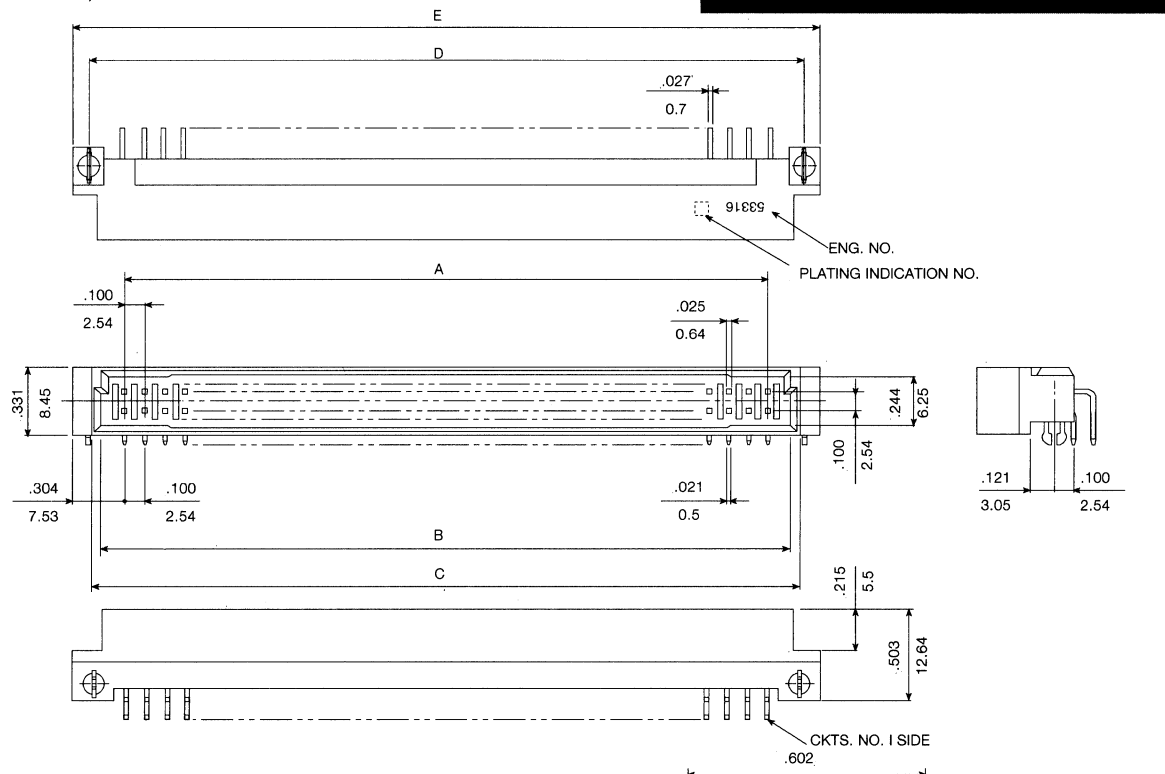
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3 = 30µin gold with nickel underplate overall and tin/lead in solder area.

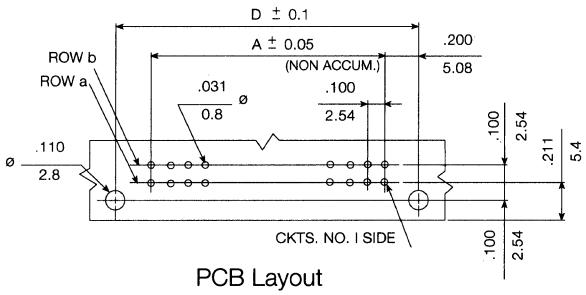
Dual Row DIN 41612 Connector

53230 Series (W/O Metal Peg)
53316 Series (Metal Peg)
Right Angle Header



- 16-64 circuits
- Header: Glass-filled P.B.T., UL 94V-0
- Pin: Brass
- Metal Peg: Phosphor Bronze
- Mates with: 52299, 52479 Series





PCB Layout

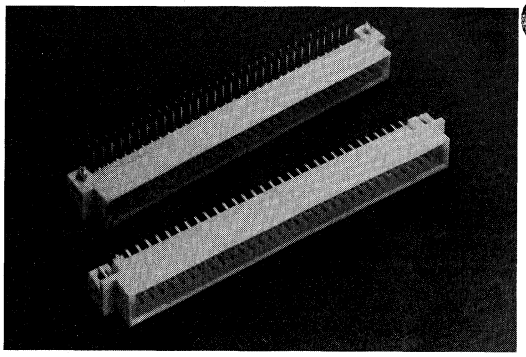
Ordering Information and Dimensions

Circuit Size	Order No.		Dim. A	Dim. B	Dim. C	Dim. D	Dim. E
	W/O Metal Peg	With Metal Peg					
16	53230-016**X**	53316-016**X**	.700 17.78	.958 24.34	1.045 26.54	1.100 27.94	1.293 32.84
20	53230-020**X**	53316-020**X**	.900 22.86	1.158 29.42	1.245 31.62	1.300 33.02	1.493 37.92
32	53230-032**X**	53316-032**X**	1.500 38.10	1.758 44.66	1.845 46.86	1.900 48.26	2.093 53.16
44	53230-044**X**	53316-044**X**	2.100 53.34	2.358 59.90	2.445 62.10	2.500 63.50	2.693 68.40
50	53230-050**X**	53316-050**X**	2.400 60.96	2.658 67.52	2.745 69.72	2.800 71.12	2.993 76.02
64	53230-064**X**	53316-064**X**	3.100 78.74	3.358 85.30	3.445 87.50	3.500 88.90	3.693 93.80

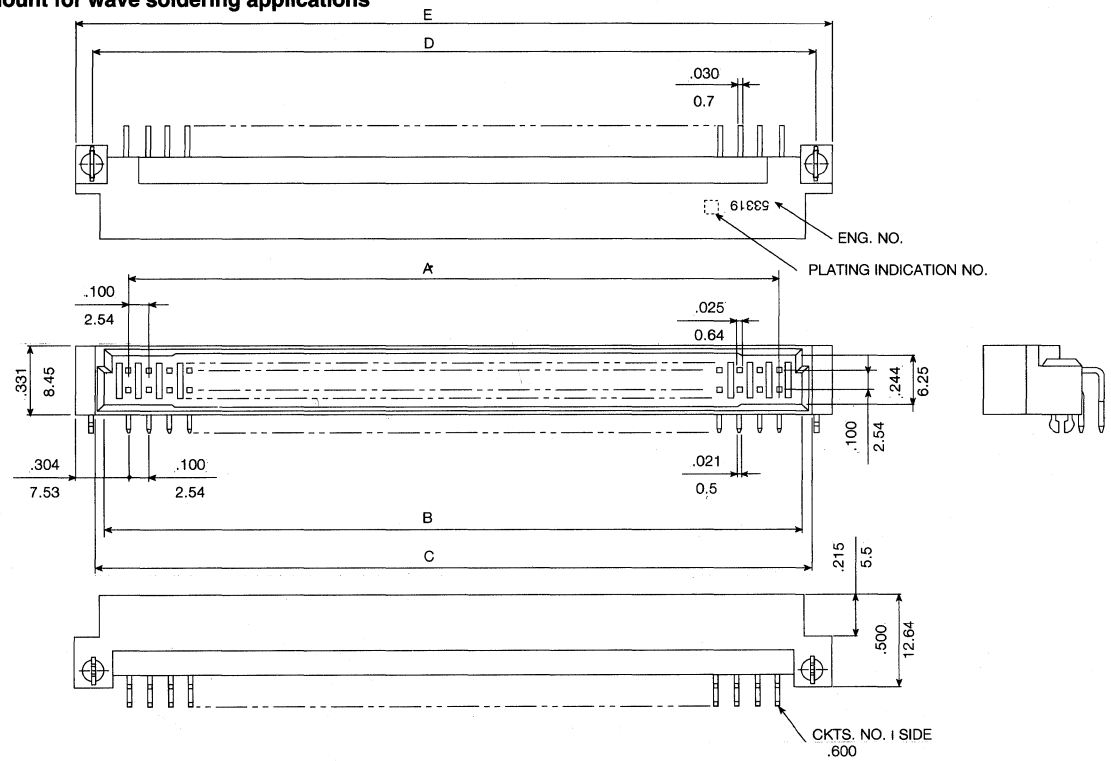
X = Plating code - Replace "**X**" in Order No. with "1" or "3". See below.
1 = 12µin gold with nickel underplate overall and tin/lead in solder area.
3 = 30µin gold with nickel underplate overall and tin/lead in solder area.

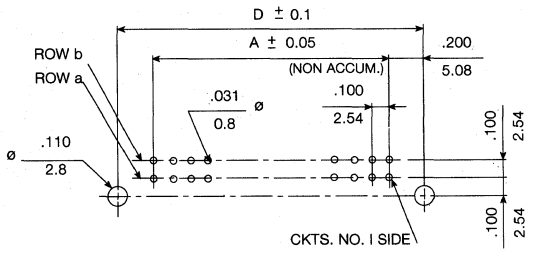
Dual Row DIN 41612 Connector

53294 Series (W/O Metal Peg)
53319 Series (Metal Peg)
Right Angle Header

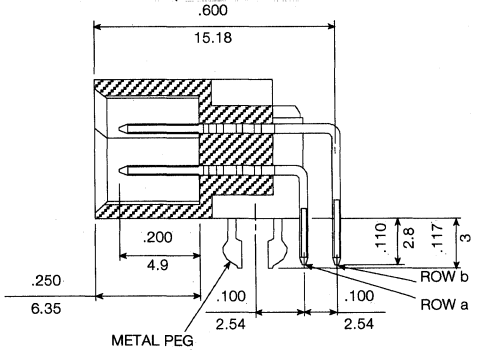


- 16-64 circuits
- Header: Glass-filled P.B.T., UL 94V-0
- Pin: Brass
- Metal Peg: Phosphor Bronze
- Mates with: 52299, 52479 Series
- **Face mount for wave soldering applications**





PCB Layout



inch / mm

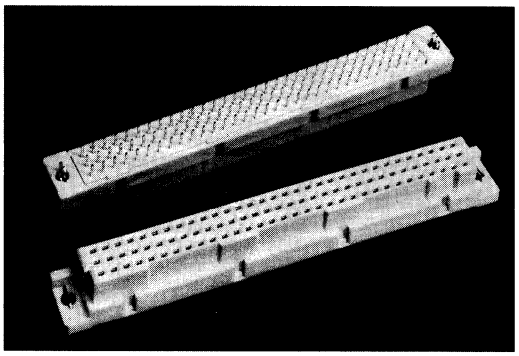
Ordering Information and Dimensions

Circuit Size	Order No.		Dim. A	Dim. B	Dim. C	Dim. D	Dim. E
	W/O Metal Peg	With Metal Peg					
16	53294-016X	53319-016X	.700 17.78	.960 24.34	1.045 26.54	1.096 27.84	1.300 32.84
20	53294-020X	53319-020X	.900 22.86	1.158 29.42	1.245 31.62	1.300 33.02	1.493 37.92
32	53294-032X	53319-032X	1.500 38.10	1.758 44.66	1.845 46.86	1.900 48.26	2.093 53.16
44	53294-044X	53319-044X	2.100 53.34	2.358 59.90	2.445 62.10	2.500 63.50	2.693 68.40
50	53294-050X	53319-050X	2.400 60.96	2.658 67.52	2.745 69.72	2.800 71.12	2.993 76.02
64	53294-064X	53319-064X	3.100 78.74	3.558 85.30	3.445 87.50	3.500 88.90	3.693 93.80

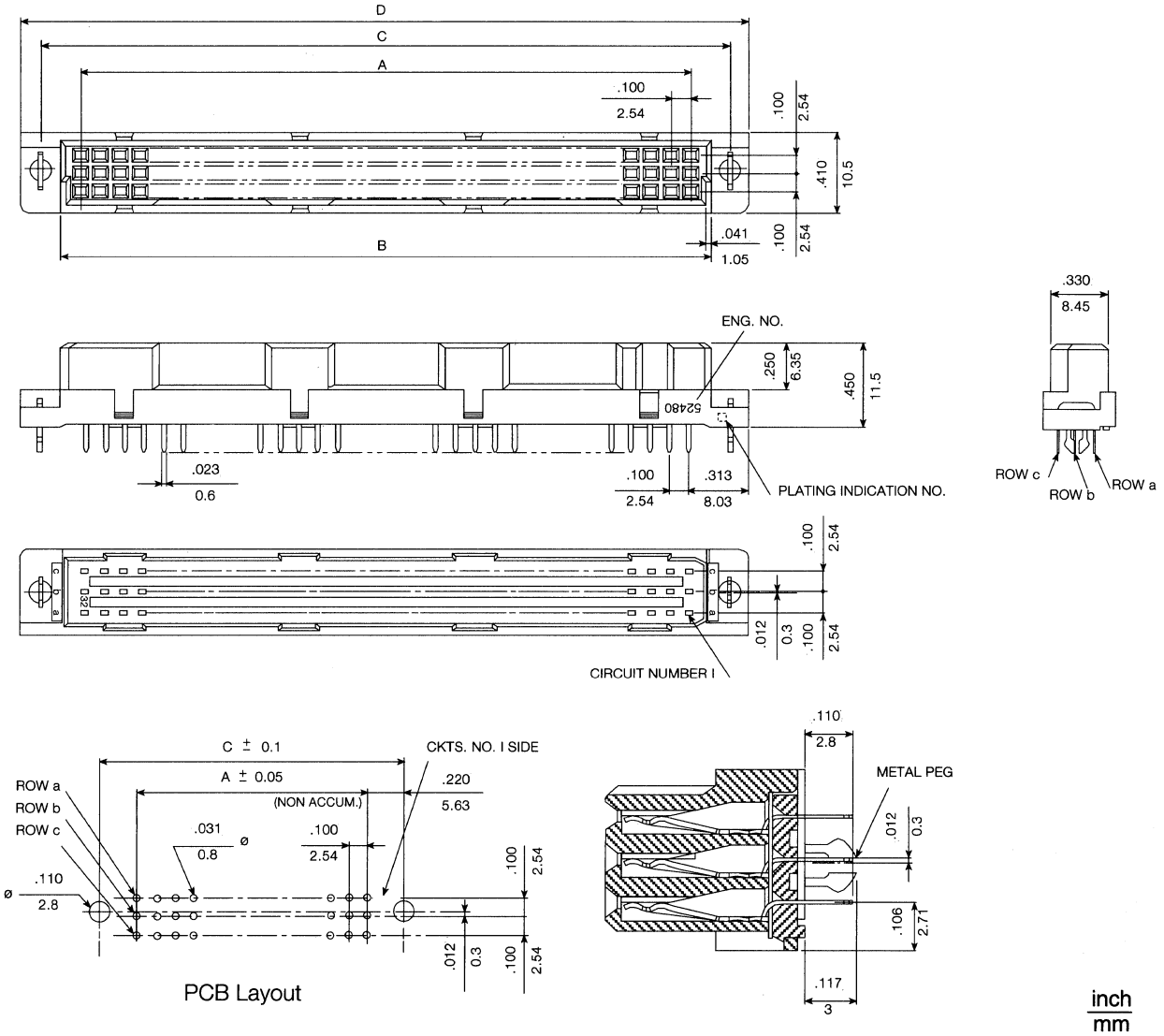
X = Plating code - Replace "**X**" in Order No. with "1" or "3". See below.
1 = 12µin gold with nickel underplate overall and tin/lead in solder area.
3 = 30µin gold with nickel underplate overall and tin/lead in solder area.

Triple Row DIN 41612 Connector

52302 Series (W/O Metal Peg)
52480 Series (Metal Peg)
Straight Receptacle



- 48 and 96 circuits
- Housing: Glass-filled P.B.T., UL 94V-0
- Terminal: Phosphor Bronze
- Metal Peg: Phosphor Bronze
- Mates with: 53233, 53317, 53234, 53318
  53296, 53320 Series



inch
mm

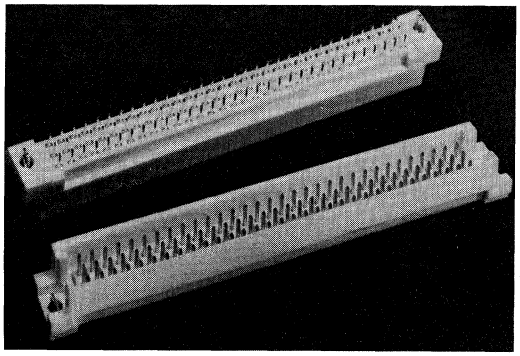
Ordering Information and Dimensions

Circuit Size	Order No.		Dim. A	Dim. B	Dim. C	Dim. D
	W/O Metal Peg	With Metal Peg				
48	52302-048**X**	52480-048**X**	1.500 38.10	1.743 44.26	1.943 49.36	2.132 54.16
96	52302-096**X**	52480-096**X**	3.100 78.74	3.345 84.90	3.543 90.00	3.732 94.80

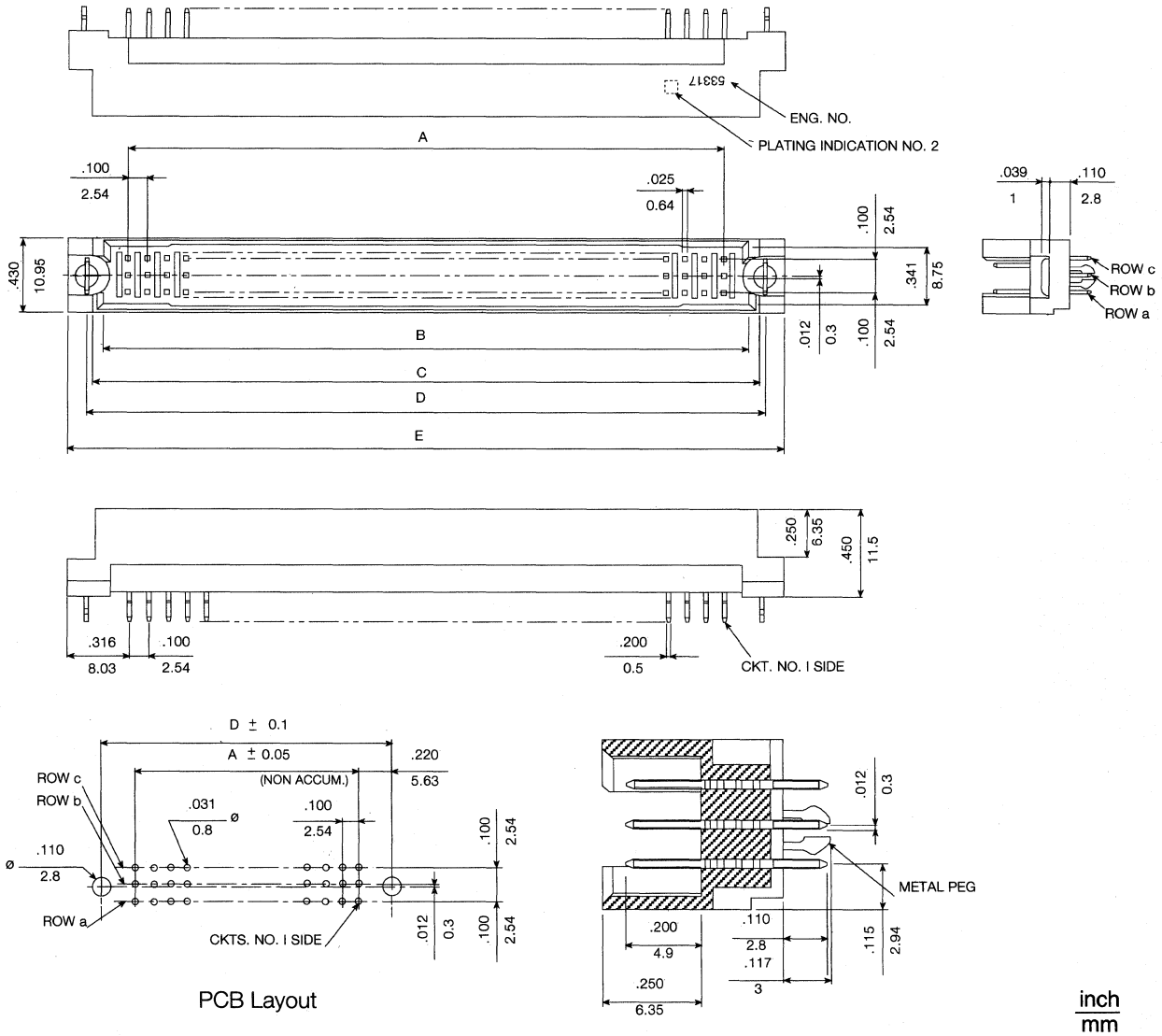
X = Plating code - Replace "**X**" in Order No. with "1" or "3". See below.
1 = 12µin gold with nickel underplate overall and tin/lead in solder area.
3 = 30µin gold with nickel underplate overall and tin/lead in solder area.

Triple Row DIN 41612 Connector

53233 Series (W/O Metal Peg)
53317 Series (Metal Peg)
Straight Header



- 48 and 96 circuits
- Header: Glass-filled P.B.T., UL 94V-0
- Pin: Brass
- Metal Peg: Phosphor Bronze
- Mates with: 52302, 52480 Series



PCB Layout

inch
mm

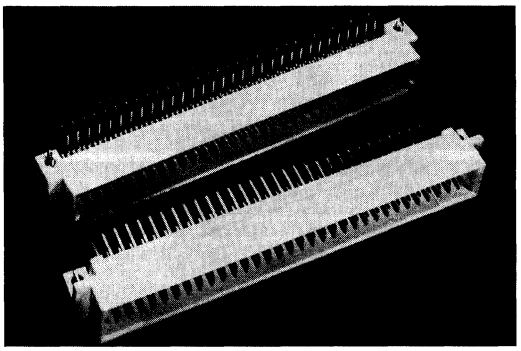
Ordering Information and Dimensions

Circuit Size	Order No.		Dim. A	Dim. B	Dim. C	Dim. D	Dim. E
	W/O Metal Peg	With Metal Peg					
48	53233-048X	53317-048X	1.500 38.10	1.758 44.66	1.857 47.16	1.943 49.36	2.132 54.16
96	53233-096X	53317-096X	3.100 78.74	3.358 85.30	3.457 87.80	3.543 90.00	3.732 94.80

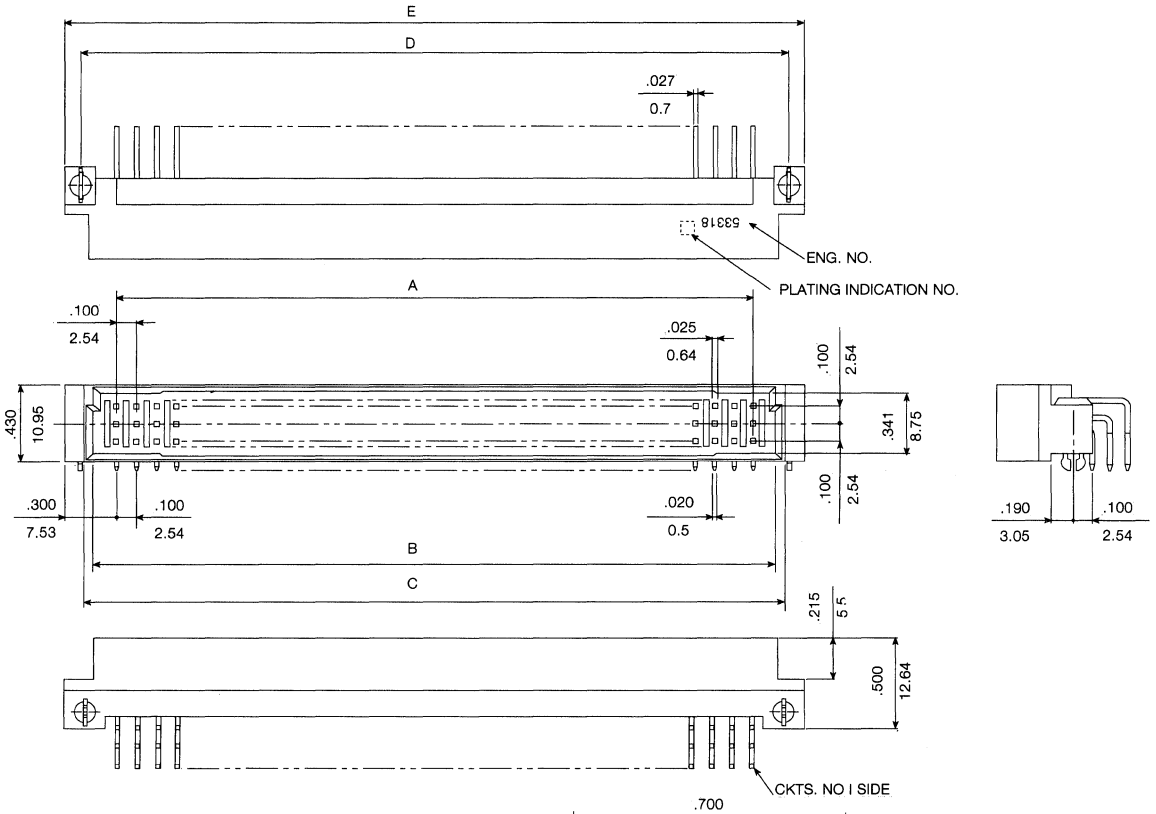
X = Plating code - Replace "X" in Order No. with "1" or "3". See below.
1 = 12µin gold with nickel underplate overall and tin/lead in solder area.
3 = 30µin gold with nickel underplate overall and tin/lead in solder area.

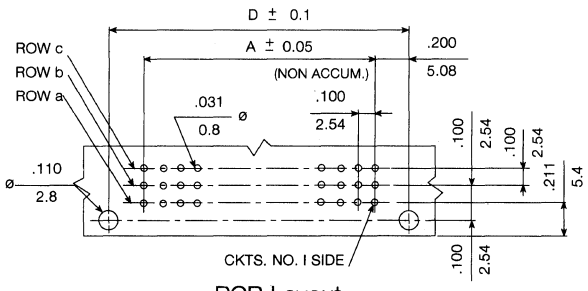
Triple Row DIN 41612 Connector

53234 Series (W/O Metal Peg)
53318 Series (Metal Peg)
Right Angle Header

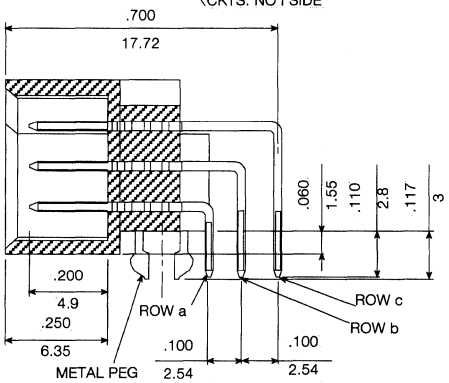


- 48 and 96 circuits
- Header: Glass-filled P.B.T., UL 94V-0
- Pin: Brass
- Metal Peg: Phosphor Bronze
- Mates with: 52302, 52480 Series





PCB Layout



inch / mm

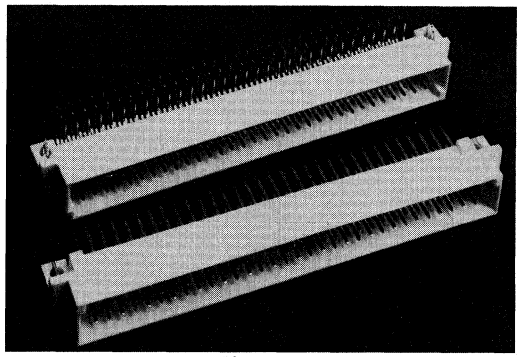
Ordering Information and Dimensions

Circuit Size	Order No.		Dim. A	Dim. B	Dim. C	Dim. D	Dim. E
	W/O Metal Peg	With Metal Peg					
48	53234-048**X**	53318-048**X**	1.500 38.10	1.758 44.66	1.845 46.86	1.900 48.26	2.093 53.16
96	53234-096**X**	53318-096**X**	3.100 78.74	3.358 85.30	3.445 87.50	3.500 88.90	3.693 93.80

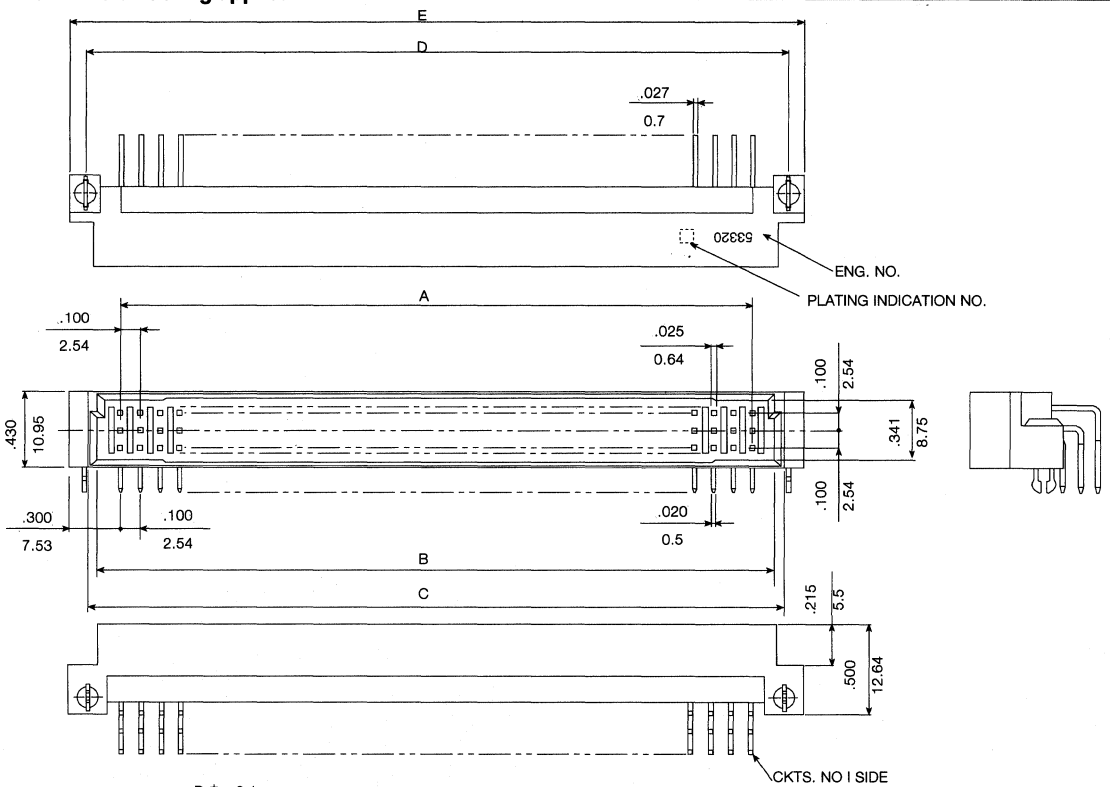
X = Plating code - Replace "**X**" in Order No. with "1" or "3". See below.
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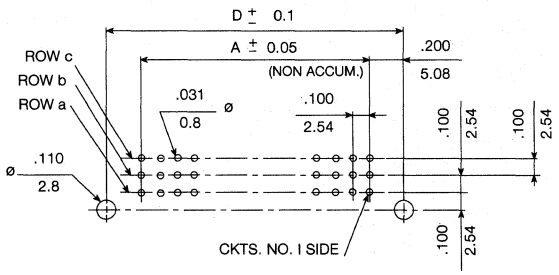
Triple Row DIN 41612 Connector

53296 Series (W/O Metal Peg)
53320 Series (Metal Peg)
Right Angle Header

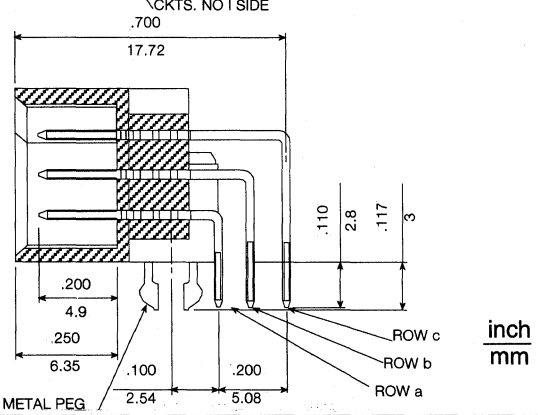


- 48 and 96 circuits
- Header: Glass-filled P.B.T., UL 94V-0
- Pin: Brass
- Metal Peg: Phosphor Bronze
- Mates with: 52302, 52480 Series
- **Face mount for wave soldering applications**





PCB Layout



inch / mm

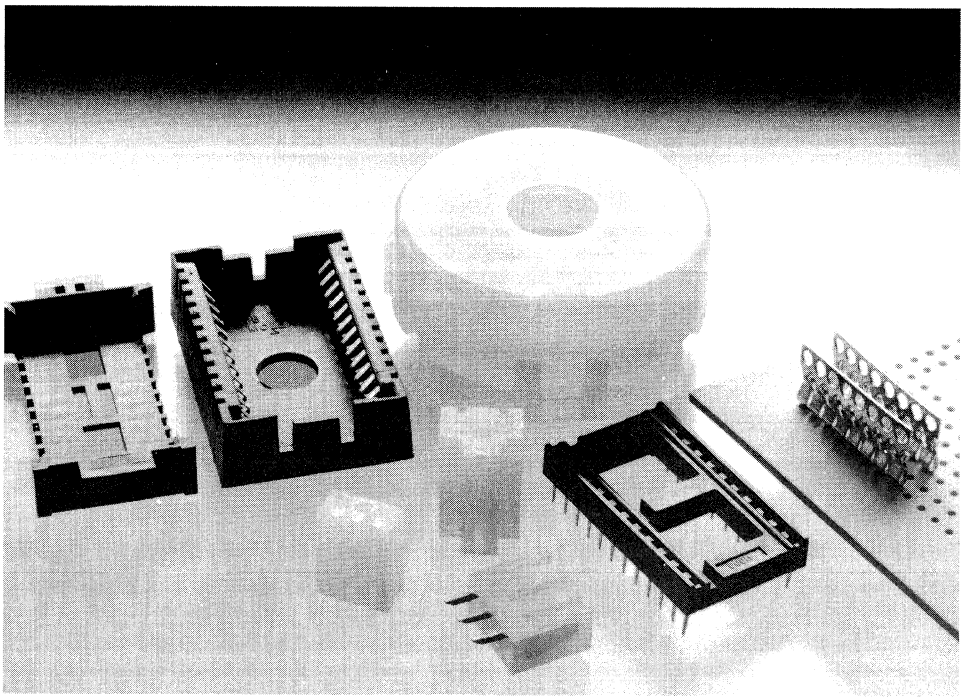
Ordering Information and Dimensions

Circuit Size	Order No.		Dim. A	Dim. B	Dim. C	Dim. D	Dim. E
	W/O Metal Peg	With Metal Peg					
48	53296-048X	53320-048X	1.500 38.10	1.758 44.66	1.845 46.86	1.900 48.26	2.093 53.16
96	53296-096X	53320-096X	3.100 78.74	3.358 85.30	3.445 87.50	3.500 88.90	3.693 93.80

X = Plating code - Replace "**X**" in Order No. with "1" or "3". See below.
1 = 12µin gold with nickel underplate overall and tin/lead in solder area.
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Sockets

Contents



Transducer Sockets 2J-3J

Transistor Sockets – Crimp Type 4J

Transistor Sockets – Solder Tail 5J

I.C. Socket Terminals 6J-7J

I.C. Sockets 8J-14J

SIMM Socket 15J

PLCC Sockets 16J-17J

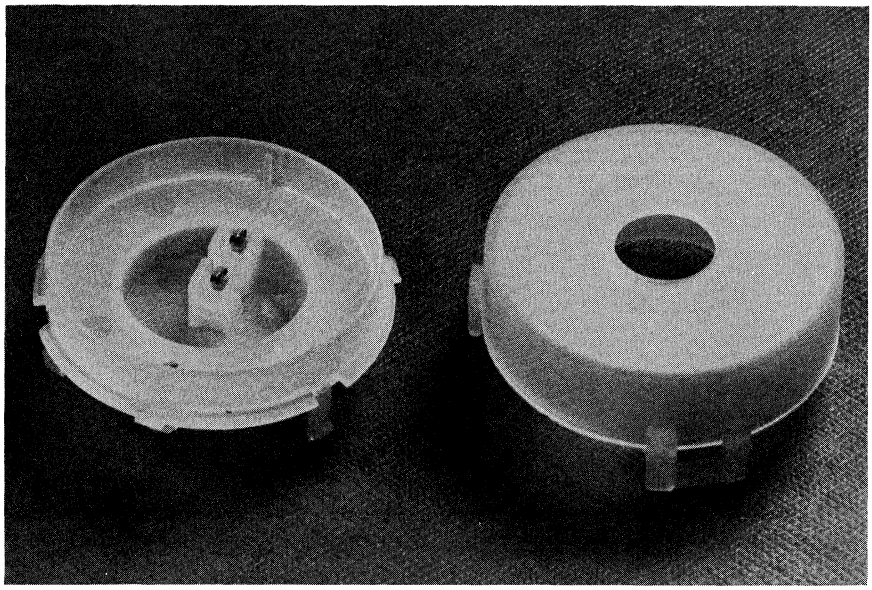
SIP Sockets 18J

J

Transducer Sockets

ATM7373
High Output

- ☐ 85dB @ 10 ft.
- ☐ 3.2 KHZ (nominal) with feedback
- ☐ Molded integral acoustic chambers
- ☐ Mounting hardware not needed
- ☐ Designed for wave soldering
- ☐ Housing material UL94-V2 or V-0
- ☐ UL component recognized S-2191

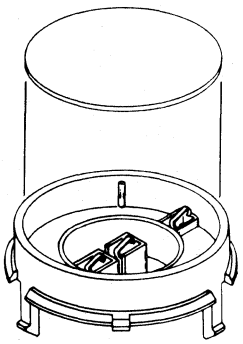


Applications:
Smoke alarms
Gas alarms
Intrusion alarms
Industrial alarms
Computer terminals
Telephones

The Audio-tone Transducer Socket ATM7373 with the recommended transducer (Piezoelectric) is an acoustic device, engineered to provide high audio output with maximum efficiency. This socket has a Helmholtz resonating cavity and provides positive clamping pressure at the nodal diameter. Terminals are provided in the base for electrical connection from the transducer to the printed circuit board. No need to use R.T.V. adhesives or solder leads. This socket provides a simple low cost assembly for manufacturers of products requiring 85+dB @ 10 ft. audio alarm.

J

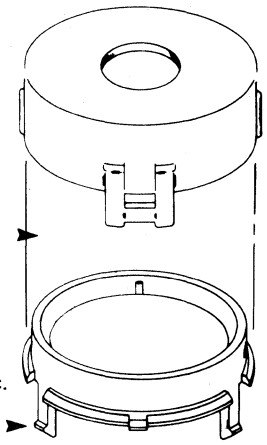
Suggested Method of Assembly:



STEP 1
Assemble Disk To Base

STEP 2
Assemble Cover To Base By Applying Equal Pressure Simultaneously At The Cover Locking Tabs. (3 Places) Use Of Assembly Fixture Is Suggested

STEP 3
Snap completed assembly onto P.C. Board before soldering

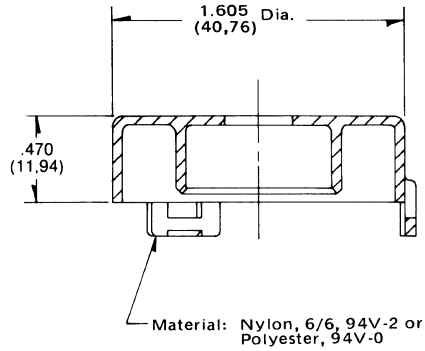


Transducer Sockets

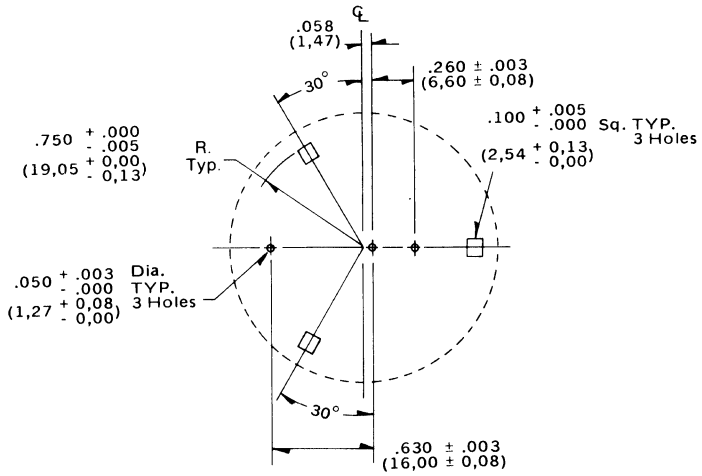
ATM7373

Dimensions:

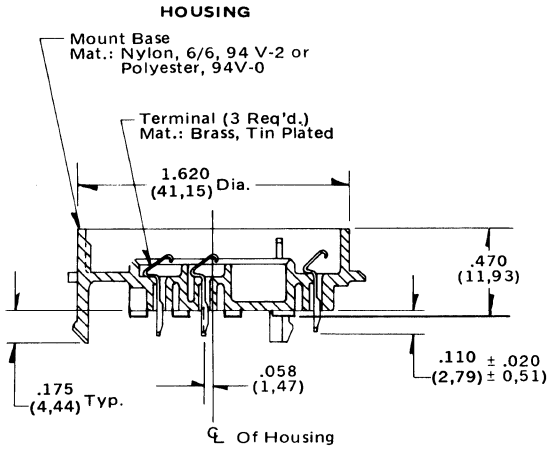
Cover



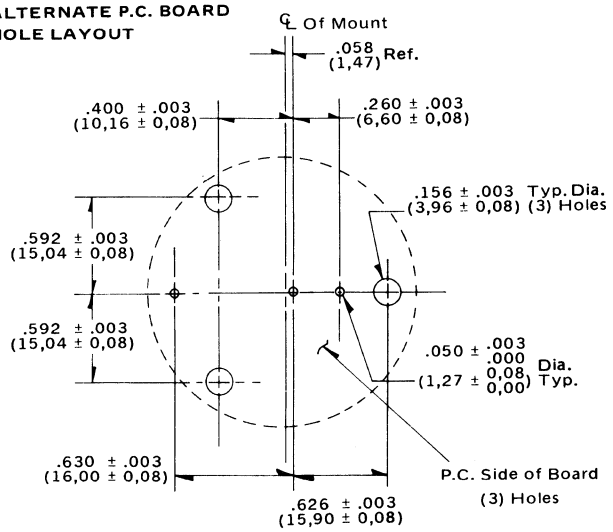
RECOMMENDED P.C. BOARD
HOLE LAYOUT FOR 7373



HOUSING

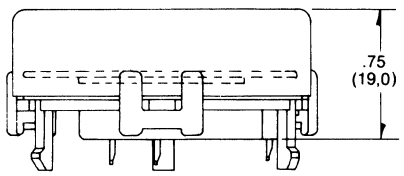


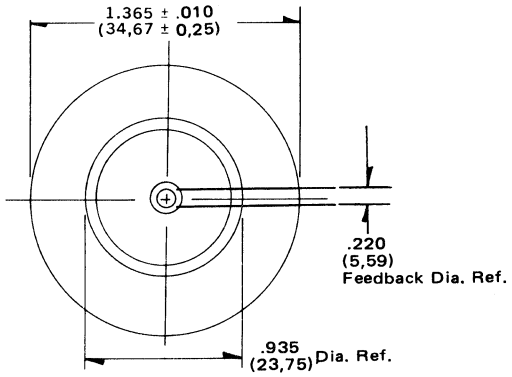
ALTERNATE P.C. BOARD
HOLE LAYOUT



HOUSING ASS'Y.

inches
mm





Recommended Transducer

Ordering Information

Order No.	Description
• 15-24-4024	Nylon (94V-2)
15-25-0002	Polyester (94V-0)

• U.S. Standard Product, available through Molex franchised distributors.

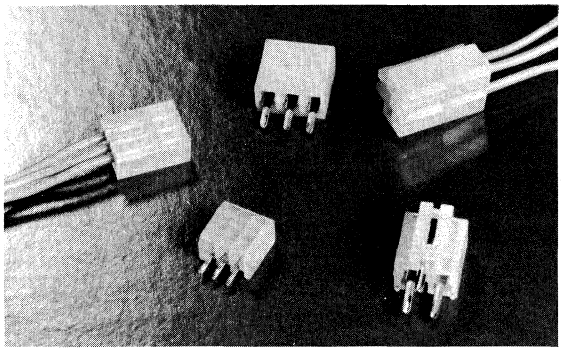
J

Transistor Sockets

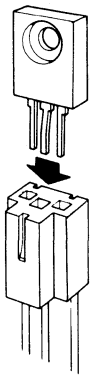
2539 & 4025 Crimp Type

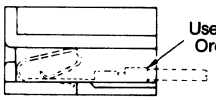
These sockets allow the use of transistors when a P.C. board is not set up to use a direct solder socket. The double cantilever terminal allows linear movement in the socket and maintains consistent contact reliability.

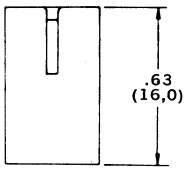
- □ 4025 Series .100" (2,54mm) centers in line
- □ 2539 Series .100" (2,54mm) centers staggered
- □ Uses crimp type double cantilever terminals
- □ Tin or gold plated brass terminals



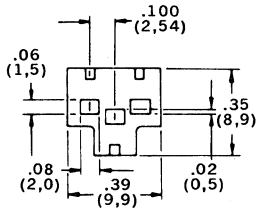
2539 Series
.100" (2,54mm) centers staggered row







inches
mm

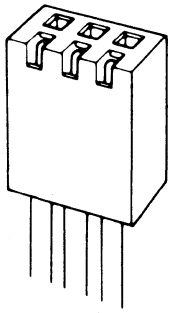


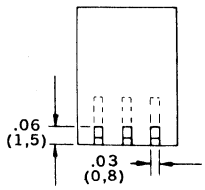
J

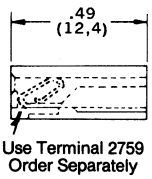
Ordering Information

Eng. No.	Order No.
2539	10-01-2031

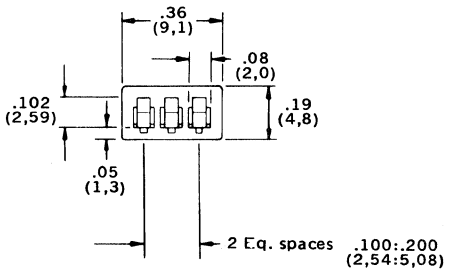
4025 Series
.100" (2,54mm) centers in-line







inches
mm

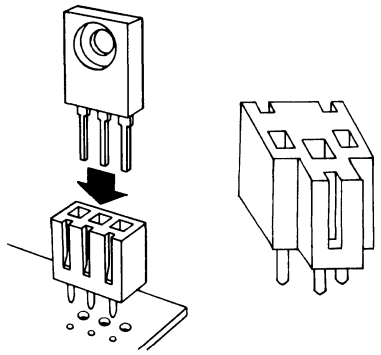


Ordering Information

Eng. No.	Order No.
4025	10-17-2032

Transistor Sockets

2512, 4038 & 2169 Solder - Tail Transistor Sockets

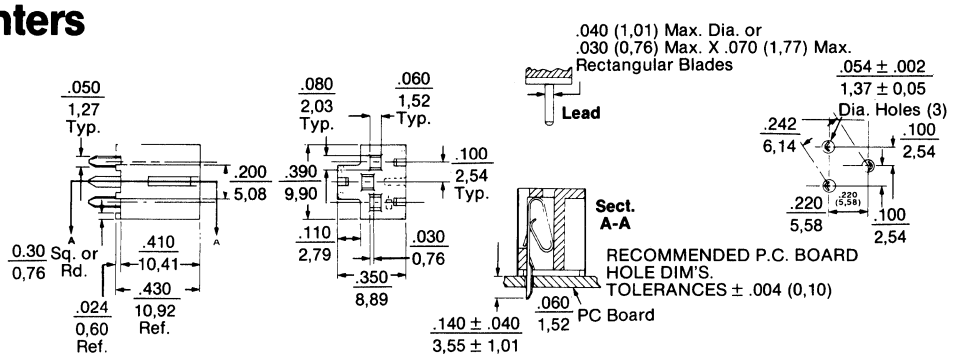


These 3 circuit transistor sockets are preassembled and ready for soldering to a P.C. board. The proven double cantilever design eliminates circuit failure due to thermal expansion and/or mechanical tolerances. Linear movement of the transistor leads in the socket does not affect contact reliability.

- ☐ 4038 and 2512 on .100" (2,54mm) centers
- ☐ 2169 on .156" (3,96mm) centers
- ☐ 2512 features P.C. solder tails
- ☐ Tin or gold plated brass
- ☐ 94V-2 rated nylon (2512 and 2169 series)
- ☐ 94V-0 polyester (4038 series)

2512 Series

.100" (2,54mm) centers



Ordering Information

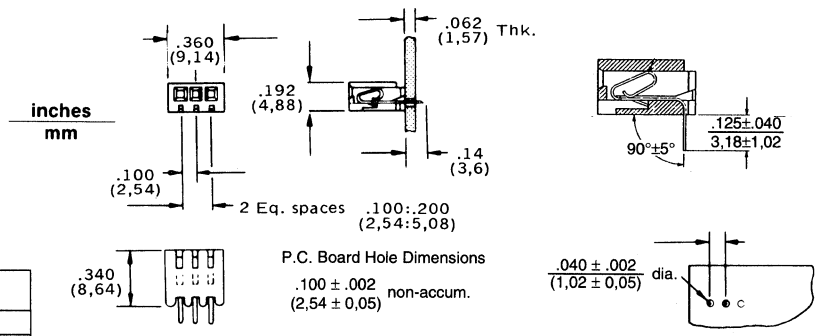
Eng. No.	Tin-Plated Brass Order No.
2512-3	09-48-3031
*2512-3-5	09-48-3032

*Terminal design different to reduce mating force; consult factory for drawing.

4038 Series

.100" (2,54mm) centers

- ☐ 94V-0 polyester
- ☐ Phosphor bronze available, contact factory

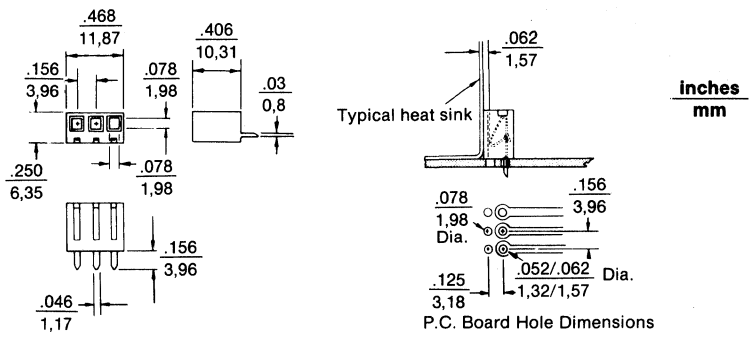


Ordering Information

Eng. No.	Tin-Plated Brass Order No.	Version
4038-1	10-18-2031	Straight
4038-2	10-18-2032	Right Angle

2169 Series

.156" (3,96mm) centers with heat sink slots



Ordering Information

Eng. No.	Tin-Plated Brass Order No.	Gold-Plated Brass Order No.
2169	09-52-3030	09-62-3030

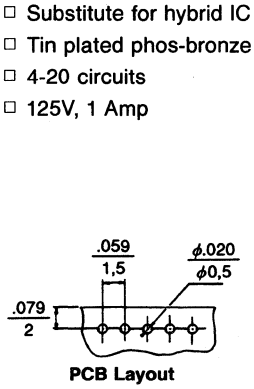
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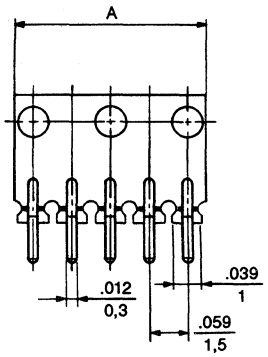
.059" (1.5mm)/.079" (2,0mm) Terminals

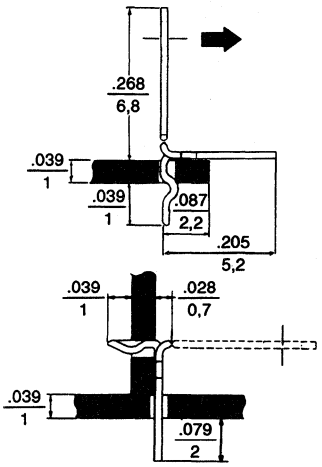
50020

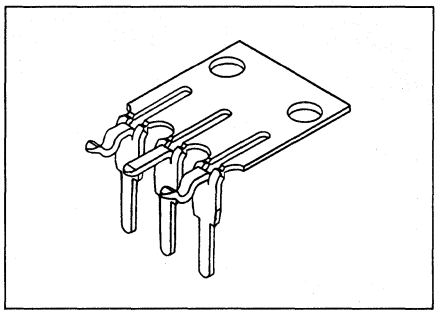
.059" (1,5mm) Terminal

- Substitute for hybrid IC
- Tin plated phos-bronze
- 4-20 circuits
- 125V, 1 Amp









Ordering Information and Dimensions

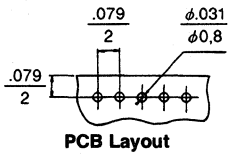
Circuits	Order No.	Dim. A	Circuits	Order No.	Dim. A
4	50020-8104	.236 6,0	13	50020-8113	.769 19,5
5	50020-8105	.295 7,5	14	50020-8114	.827 21,0
6	50020-8106	.354 9,0	15	50020-8115	.886 22,5
7	50020-8107	.413 10,5	16	50020-8116	.945 24,0
8	50020-8108	.472 12,0	17	50020-8117	1.004 25,5
9	50020-8109	.531 13,5	18	50020-8118	1.063 27,0
10	50020-8110	.591 15,0	19	50020-8119	1.122 28,5
11	50020-8111	.650 16,5	20	50020-8120	1.181 30,0
12	50020-8112	.709 18,0			

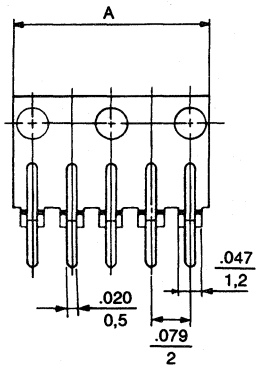
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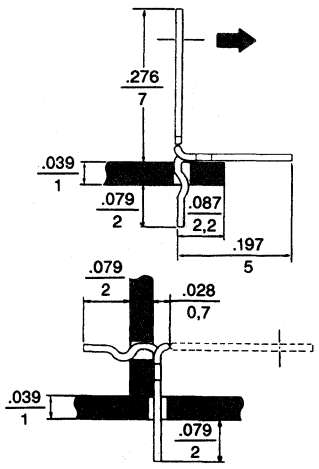
50002

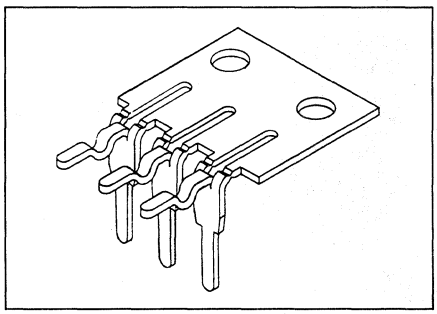
.079" (2,0mm) Terminal

- Substitute for hybrid IC
- Tin plated phos-bronze
- 3-20 circuits
- 125V, 1 Amp









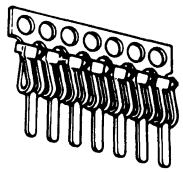
Ordering Information and Dimensions

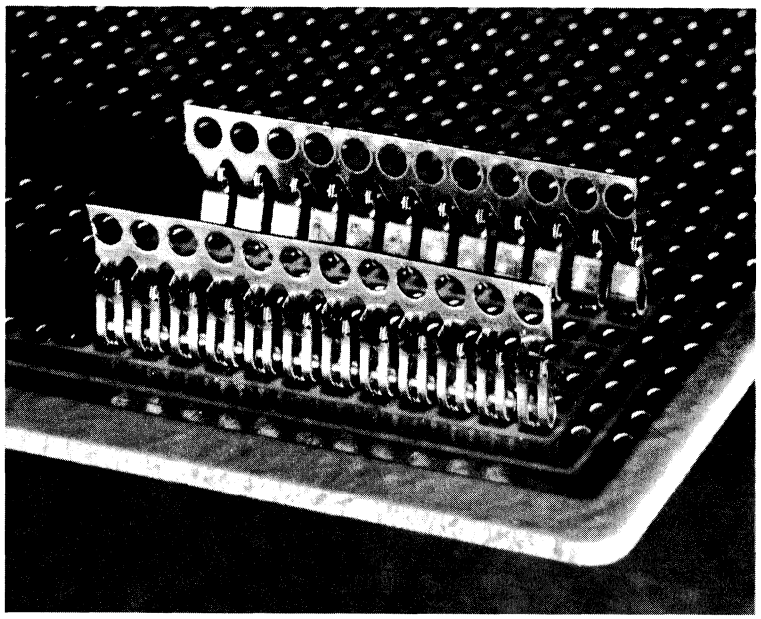
Circuits	Order No.	Dim. A	Circuits	Order No.	Dim. A
3	50002-8103	.236 6,0	12	50002-8112	.945 24,0
4	50002-8104	.315 8,0	13	50002-8113	1.024 26,0
5	50002-8105	.394 10,0	14	50002-8114	1.102 28,0
6	50002-8106	.472 12,0	15	50002-8115	1.181 30,0
7	50002-8107	.551 14,0	16	50002-8116	1.260 32,0
8	50002-8108	.630 16,0	17	50002-8117	1.339 34,0
9	50002-8109	.709 18,0	18	50002-8118	1.417 36,0
10	50002-8110	.788 20,0	19	50002-8119	1.496 38,0
11	50002-8111	.866 22,0	20	50002-8120	1.575 40,0

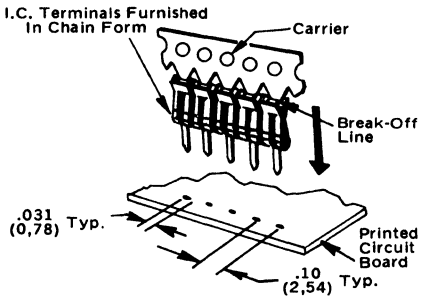
IC Socket Terminals

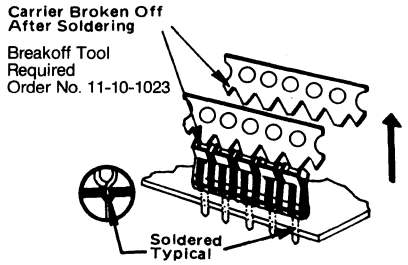
1938-4 IC Socket Terminals

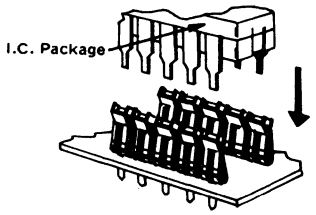
- Intended for applications where a full ladder style socket is not needed
- Available in chain form or pre-cut strips
- Phos/bronze or brass material
- Tin plate finish





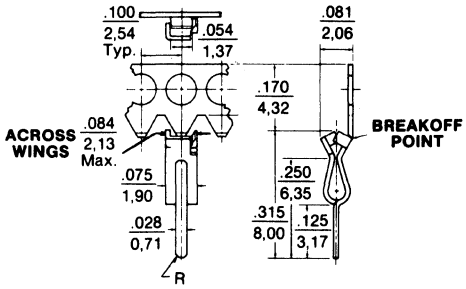






J

1938-4 Series
.100" (2,54) centers



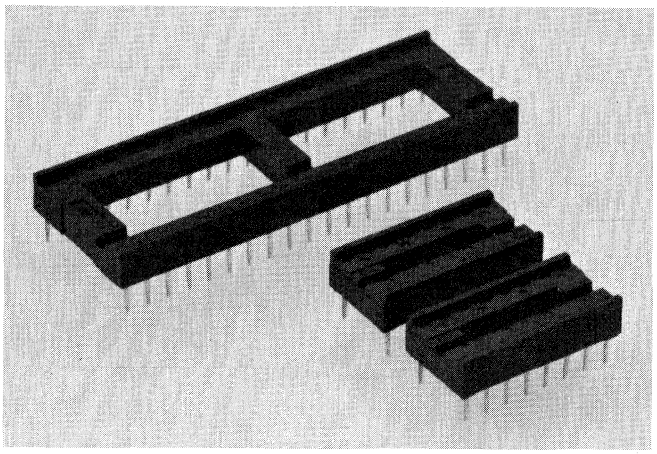
Ordering Information

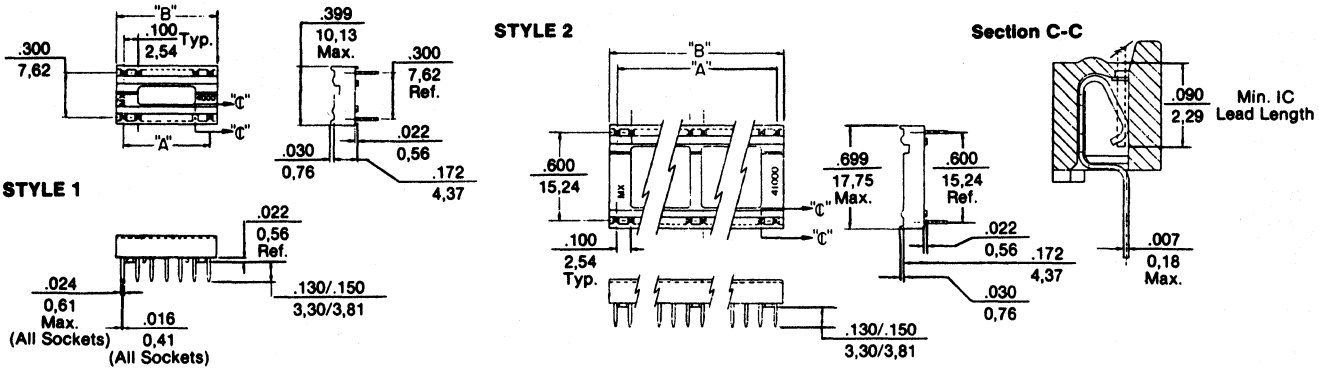
PRE-TINNED BRASS				CHAIN FORM		
	Order No.		Order No.	Material	Finish	Order No.
Configuration chain form on reels	05-30-0001	8 per pre-cut strip	05-30-0008	70/30 brass	Tin plate	05-30-0001
2 per pre-cut strip	05-30-0002	9 per pre-cut strip	05-30-0009	Phos/bronze	Tin plate	05-33-0001
3 per pre-cut strip	05-30-0003	20 per pre-cut strip	05-30-0020			
7 per pre-cut strip	05-30-0007	25 per pre-cut strip	05-30-0025			

Dual-In-Line IC Socket

41000 Series

- Designed to house and protect fragile IC leads
- Compatible with major brand auto-insertion machines
- Meets performance standards of MIL 83734-D and EIA Standards RS-415-A Class II
- Packaged in plastic tubes oriented in one direction
- Housing sidewalls guide and orient IC leads during insertion
- Visible polarization
- Takes variety of leads
- Stackable on .100" (2,54mm) centers end-to-end
- Standoffs eliminate capillary ladder condition
- Tails exposed on component side of PC board to simplify cleaning operation





J

Specifications

Material:

Housing - Glass filled polyester UL rated 94V-0, color - black
Terminal - Phosphor bronze
Finish - Tin/lead .0002" (0,005mm) min. thick
Optional Finish - Tin .000035" (0,00089) min. over copper flash

Mechanical:

Insertion Forces - 12 oz. (340.2 grams) using a .015" (0,38mm) thick x .025" (0,64mm) wide probe
Withdrawal Forces - 1.0 oz. (28,4 grams) using an .008" (0,20mm) thick x .015" (0,38mm) wide probe. [After 25 cycles with a .015" (0,38mm) thick by .025" (0,64mm) wide probe]
Terminal/Housing Retention Force - Terminal withstands a one pound (0,45 kg.) min. axial push/pull out force applied at base of terminal

Electrical:

Insulation Resistance - Greater than 500K megohms
Contact Resistance - 20 milliohms
Rated Voltage - 250 volts
Rated Current - 1 AMP max.
Dielectric Strength - 1500 volts R.M.S.
Capacitance Between Terminals -500 pfd max.

Environmental:

Thermal Shock - (Per MIL-STD-202F, Method 107D)
Physical Shock - (Per MIL-STD-202E, Method 213B, Condition A)
Vibration - (Per MIL-STD-202E, Method 201A)
Humidity - (Per MIL-STD-202E, Method 106)
Salt Spray - (Per MIL-STD-202F, Method 101D)
Cyclic Humidity - (Per MIL-STD-202F, Method 106E Step 7A)

Notes:

1. Accept IC Leads .008" (0,20mm)/.017" (0,43mm) thick by .014" (0,36mm)/ .024" (0,61mm) wide.
2. Suggested PC board hole dia. .028" (0,71mm) / .043" (1,09mm)
3. Min. IC lead length .090" (2,29mm) (See Section C-C)

Ordering Information

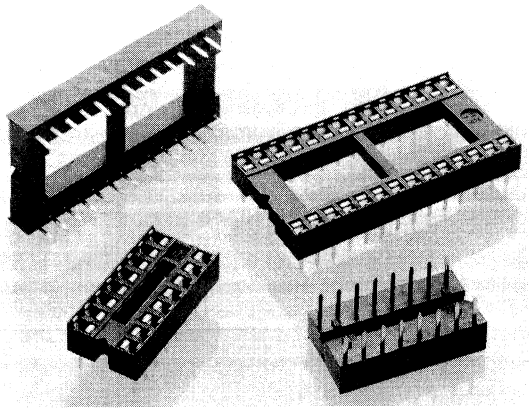
Tin/Lead Order Number	Tin Order Number	Circuits	Dim. A	Dim. B (Max.)	Socket Style	Tin/Lead Order Number	Tin Order Number	Circuits	Dim. A	Dim. B (Max.)	Socket Style
A-41000-0830	A-41000-0810	8	.300 7,62	.399 10,13	1	A-41000-2030	• A-41000-2010	20	.900 22,86	.999 25,37	1
A-41000-1430	• A-41000-1410	14	.600 15,24	.699 17,75	1	A-41000-2430	• A-41000-2410	24	1.100 27,94	1.199 30,45	2
A-41000-1630	• A-41000-1610	16	.700 17,78	.799 20,29	1	A-41000-2830	• A-41000-2810	28	1.300 33,02	1.399 35,53	2
A-41000-1830	• A-41000-1810	18	.800 20,32	.899 22,83	1	A-41000-4300	• A-41000-4010	40	1.900 48,26	1.999 50,77	2

• U.S. Standard Product, available through Molex franchised distributors.

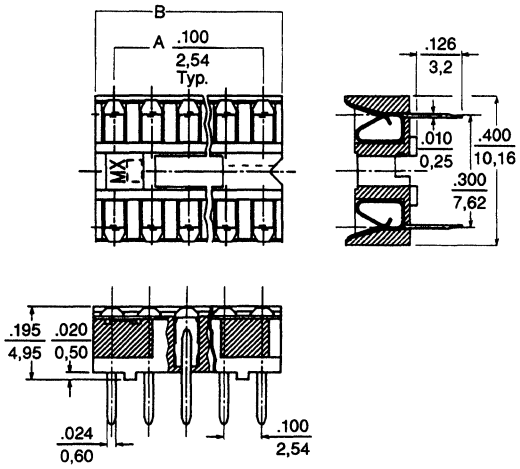
Dual-In-Line IC Socket

42000 Series

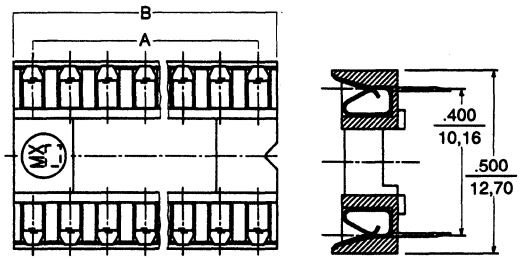
- Easy I.C. insertion – large target area. Takes a variety of leads
- Socket, stackable side-by-side and end-to-end on .100" (2,54mm) grid spacing
- Visible polarization
- Low profile
- Sockets are packaged in plastic tubes oriented in one direction
- Closed-bottom sockets have a .020" (0,51mm) standoff at base to facilitate post-soldering board cleaning operations
- Two points of contact. High reliability connection with low insertion force
- Compatible with major brand auto-insertion machines
- Terminals are phosphor bronze, tin preplated



STYLE 1
.300" (7,62mm) x .100" (2,54mm)



STYLE 2
.400" (10,16mm) x .100" (2,54mm)
Available in 22 circuit version only



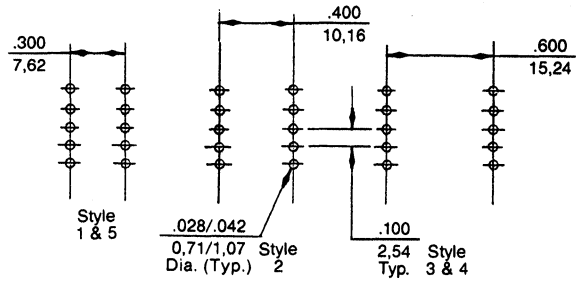
Ordering Information and Dimensions

Order No.	Ckts	Dim. A	Dim. B
42000-0610	6	.200 5,08	.300 7,62
42000-0810	8	.300 7,62	.400 10,16
42000-1410	14	.600 15,24	.700 17,78
42000-1610	16	.700 17,78	.800 20,32
42000-1810	18	.800 20,32	.900 22,86
42000-2010	20	.900 22,86	1.000 25,40

Ordering Information and Dimensions

Order No.	Ckts	Dim. A	Dim. B
42000-2220	22	1.000 25,40	1.100 27,94

Recommended PC Board Specification (All Styles)
Board Thickness .062 ± .008

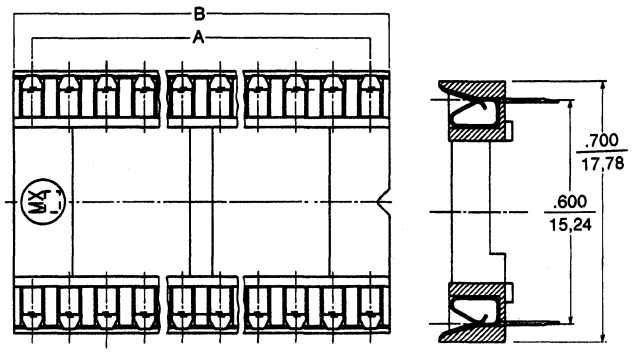


J

Dual-In-Line IC Socket

42000 Series

STYLE 3
.600" (15,24mm) x .100" (2,54mm)



Ordering Information and Dimensions

Order No.	Ckts	Dim. A	Dim. B
42000-2430	24	1.100 27,94	1.200 30,48
42000-2830	28	1.300 33,02	1.400 35,56
42000-3230	32	1.500 38,10	1.600 40,64
42000-4030	40	1.900 48,26	2.000 50,80

Specifications

Materials:

Housing — 94V-0 glass filled polyester, black
Terminal — Copper Alloy (Phosphor bronze)
Plating — Pre-Tinned, .0002" (0,005mm)

Mechanical:

Phosphor bronze version

Insertion forces—Maximum insertion force per terminal is 340 grams using a .038/.015 thick x 0.56/.022 wide probe.

Withdrawal forces— After 2 cycles with a 0.38/.015 thick x 0.56/.022 wide probe, the minimum withdrawal force must be 25 grams using a .020/.008 thick x 0.38/.015 wide probe.

Contact Retention in Housing — 400 gram min.

Electrical:

Insulation Resistance — Greater than 500k megohms
Contact Resistance — 15 milliohms max. (initial)
30 milliohms max. (after test)
Rated Voltage — 250 volts
Rated Current — 1 amp max./circuit at 20°C
Dielectric Strength — Withstands 1000 volts R.M.S. applied between adjacent terminals for (60) seconds without breakdown

Environmental:

Operating Temperature — *-40°C - +105°C*

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Zig-Zag In-Line Package IC Socket

90510 Series
For ZIP IC Modules

- Uses half the board space of conventional DIP sockets
- Side-to-side and end-to-end stackable
- Dual beam contacts
- Large target areas enable easy IC insertion
- Two sizes available: 16 position for 256K devices; 20 position for 1 megabyte chips
- Packaged in tubes

Specifications

Housing:
Glass filled polyester, UL 94V-0, black

Contact:
Phosphor bronze

Plating:
Pre-tinned

Recommended PCB Thickness:
.062" (1,57mm)

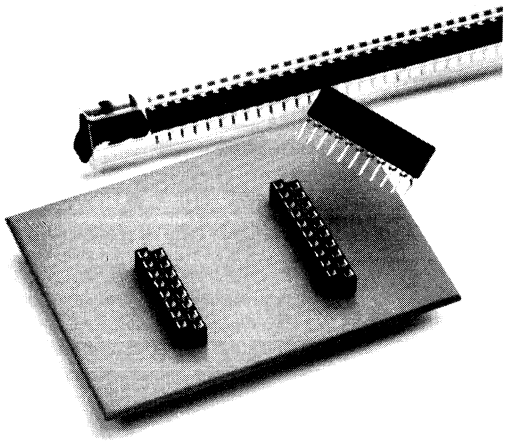
Voltage Rating:
250 V ac

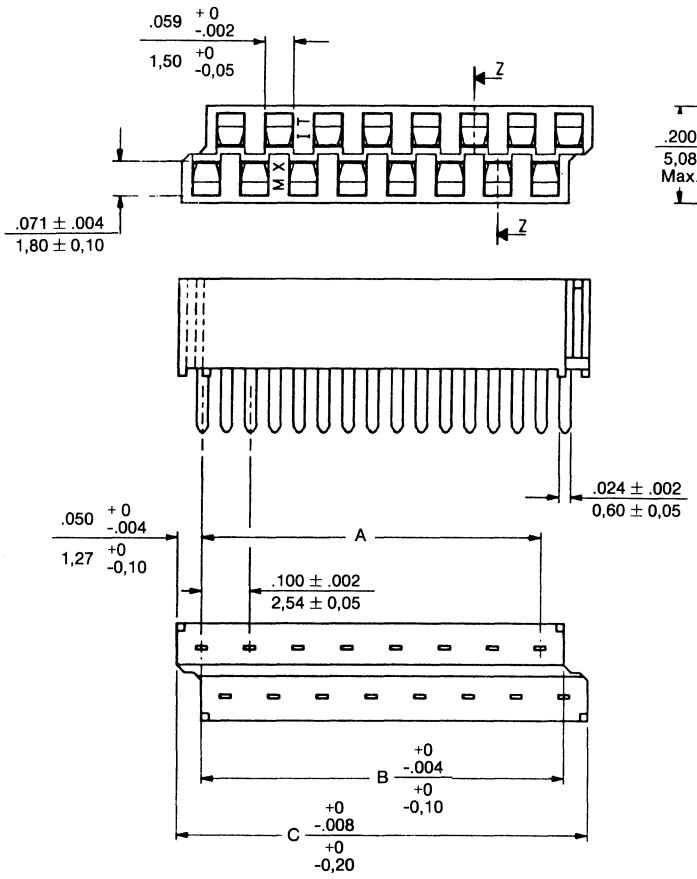
Current Rating:
1 Amp max./circuit

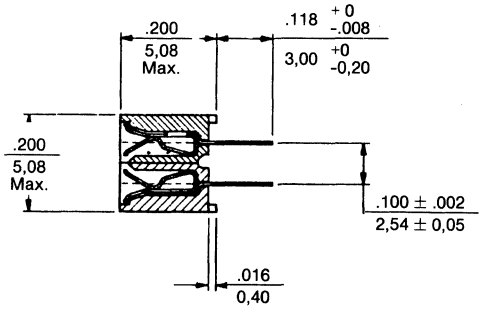
Insulation Resistance:
1000 Megohms min.

Contact Resistance:
15 milliohms initial

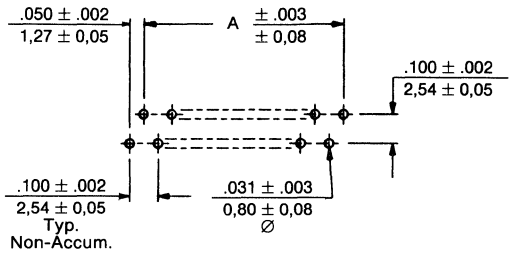
Dielectric Strength:
Withstands 750 V ac







SECTION Z-Z



Recommended PCB Layout
Viewed from Component Side

J

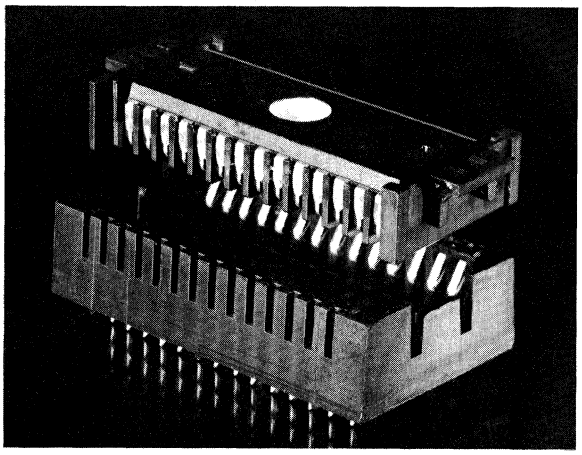
Ordering Information and Dimensions

Circuit Size	Order No.	Dim. A	Dim. B	Dim. C
16	90510-0016	.700 17,78	.750 19,05	.850 21,59
20	90510-0020	.900 22,86	.950 24,13	1.050 26,67
24	90510-0024	1.10 27,94	1.15 29,21	1.25 31,75
28	90510-0028	1.30 33,02	1.35 34,29	1.45 36,83
40	90510-0040	1.90 48,26	1.95 49,53	2.05 52,07

*Contact factory for circuit sizes 18, 22, 26

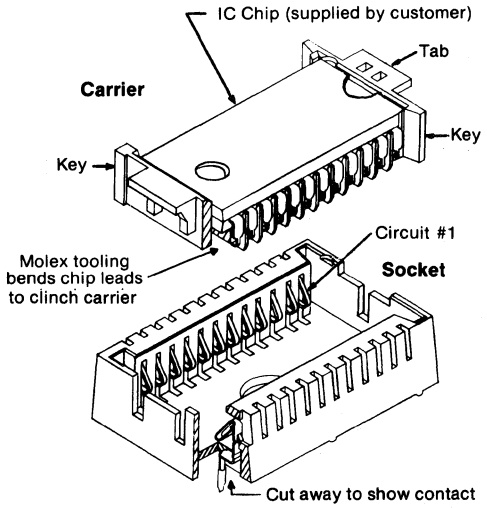
Modular IC Socket System

78804/5/7
"User Friendly" Socket & Carrier



- ☐ Cost effective method for interchanging IC devices by non-technical personnel
- ☐ Prevents damage to IC device thru a fully shrouded carrier
- ☐ Pull tabs for fast and easy insertion/withdrawal
- ☐ Polarizing keys prevent misassembly of carrier to socket
- ☐ Socket contacts solder to a .062" (1,57mm) thick PC board
- ☐ For standard .100" x .600" (2,54 x 15,24mm) PC hole patterns
- ☐ Recommended .040" (1,02mm) dia. PC board hole
- ☐ Double cantilever terminal
- ☐ Low profile, .410" (10,41mm) high

The 7880X is useful wherever field replacement, updating, or reprogramming is required of microprocessors, ROM's, PROM's, E-PROMS.



Applications:

Language translators	Process and industrial contols
Instrumentation	Electronic games
Telecommunications	Automotive
Business machines	Vending machines

Electronic printers/Computer equipment
Medical instrumentation

J

Specifications:

For use with 24, 28, and 32 pin lead frame IC devices on .100" x .600" grid.

Materials - Socket, Carrier: Glass filled polyester 94V-0
Terminal: Beryllium Copper
Plating: .000200 min. tin/lead in contact area
.000075 min. tin/lead in PC tail area
over .000050 min. nickel overall

Terminal Retention in Socket - 1 lb. per circuit min.

Carrier Insertion Withdrawal Forces - Insertion: 68-204 grams per circuit*
Withdrawal: 68-250 grams per circuit

Max. Mating Cycles - Tin: 5 cycles*

*Dependent upon terminal/IC device interface configuration and plating - such as plating type, composition and quality.

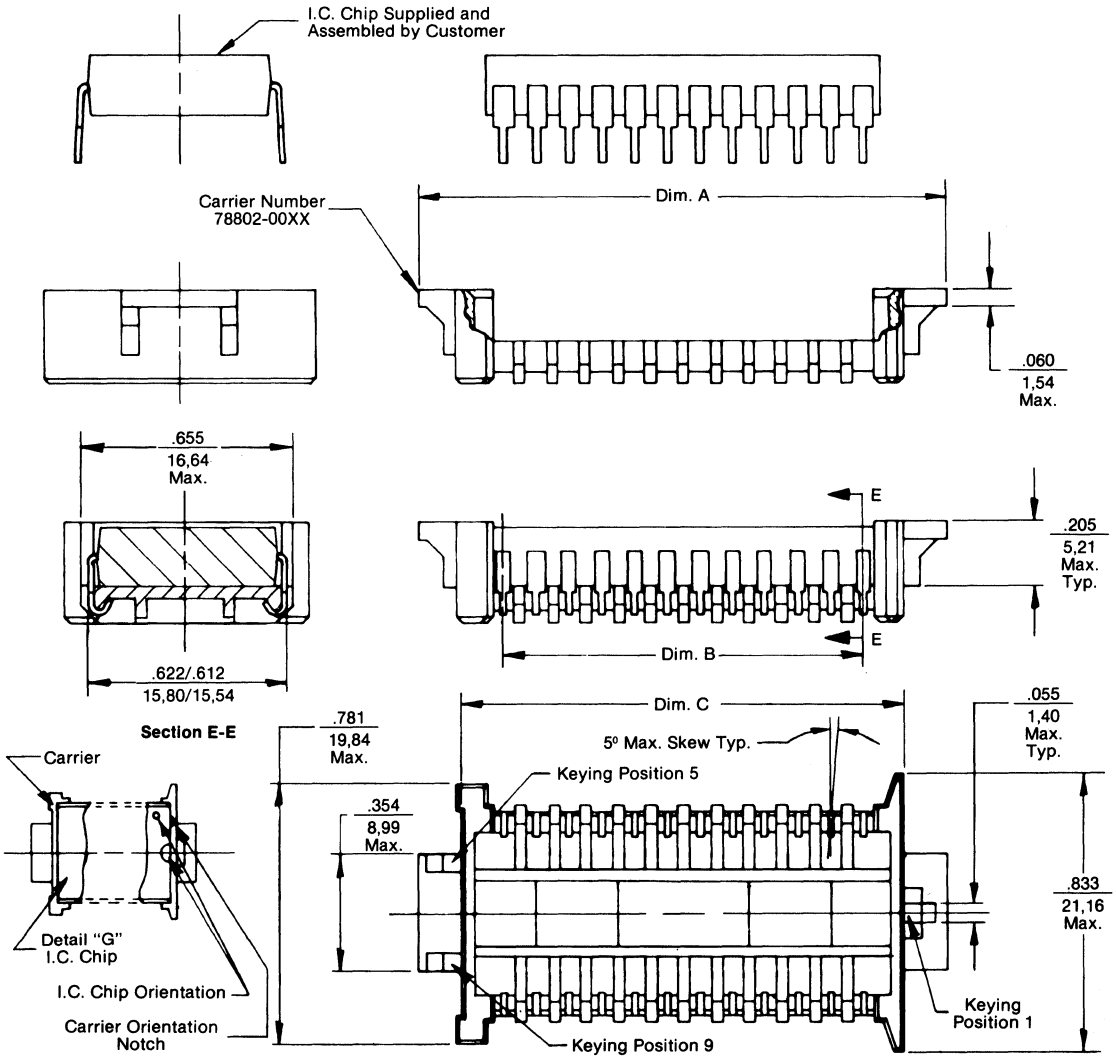
Ordering Information

Sockets, Black			Carriers, Black		
Eng. No.	Size	Tin	Eng. No.	Size	Glass Filled Polyester
78804	24	15-29-9242	78802	24	50-39-5248
78805	28	15-29-9282	78802	28	50-39-5288
78807	32	15-41-3329	78802	32	50-57-5283

IC Socket System

78804/5/7

Carrier Dimensions



Application Tooling:

AM 60161	Manually operated bench tool. Crimps two sides of chip to carrier at once.

NOTE: Carrier dimensions reflect Molex approved standards for IC packages using standard lead frame construction. Consult factory for socket system using side brazed IC version.

Refer to Application Tooling Section of this catalog for further information Customer IC packages require setup of tooling by Molex.

Dimensions

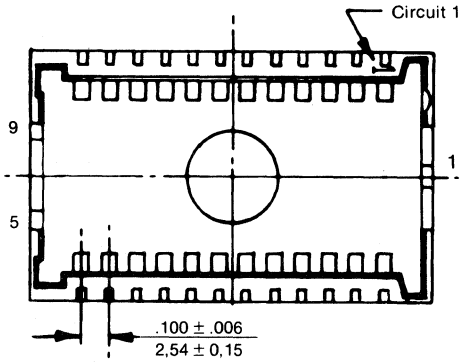
inches
mm

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
24	1.637 41,58	1.100 27,95	1.367 34,72	32	2.037 51,74	1.500 38,10	1.767 44,88
28	1.837 46,66	1.300 33,02	1.567 39,80				

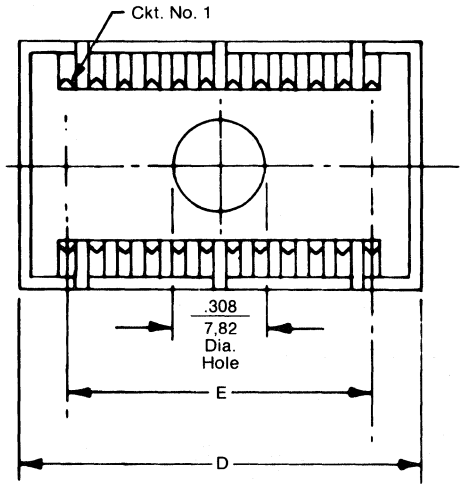
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78804/5/7

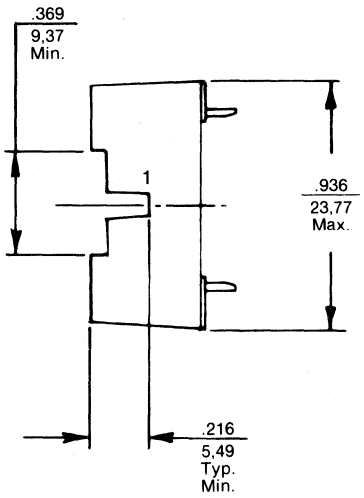
Socket Dimensions



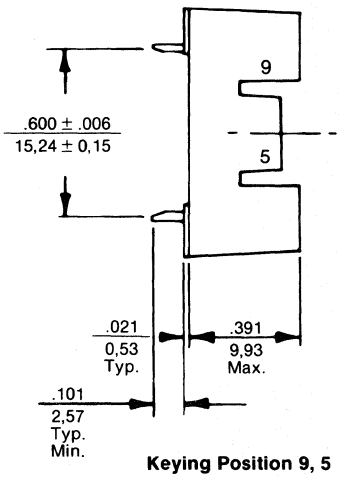
Top View



Bottom View



Keying Position 1

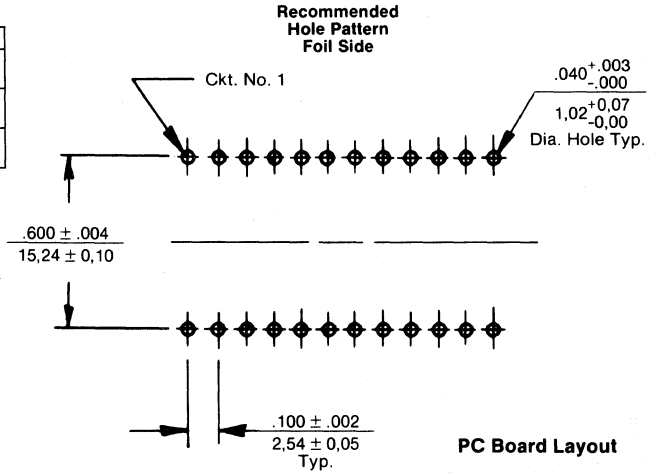


Keying Position 9, 5

Dimensions - Socket

Circuits	Dim. D (Max.)	Dim. E (Min.)
24	1.465 37,21	1.100 ± .006 27,94 ± 0,15
28	1.665 42,30	1.300 ± .006 33,02 ± 0,15
32	1.860 42,74	1.500 ± .006 38,16 ± 0,15

NOTE: Dimensions given across centerline are symmetrical about those centerlines within half the total tolerance.



PC Board Layout

SIMM* Socket

*Single In-Line Memory Module

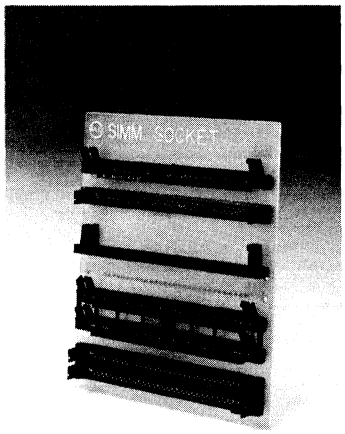
788XX Series

Molex's single in-line memory module socket serves as the connector portion of a high-density board-to-board packaging system.

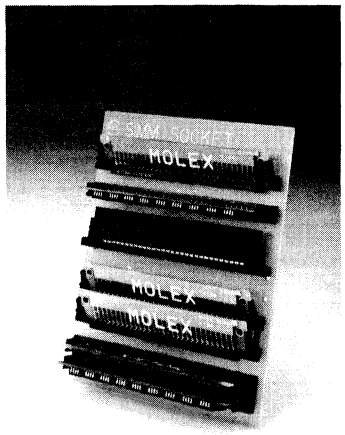
Its name implies it is a socket. It is, in fact, an edge connector which accommodates baby boards with SIP modules attached.

See this product in Section F, this catalog.

The SIMM Socket appears in Section F of this catalog.



Five styles of SIMM Sockets inserted into P.C. Board.



SIMM Sockets with customer-supplied baby boards inserted.

J

PLCC Sockets

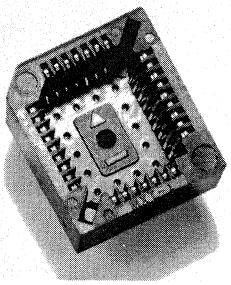
87246 Series

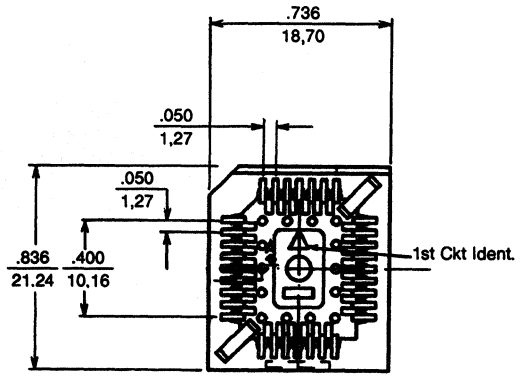
- 32 circuits
- .100" (2,54mm) center spacing
- Accepts JEDEC Type A rectangular chips
- Raised inner platform with molded stops reduces stress on J-leads
- High normal force
- Packaged in tubes
- Locating peg available
- Black color housing standard, brown color housing available; contact factory

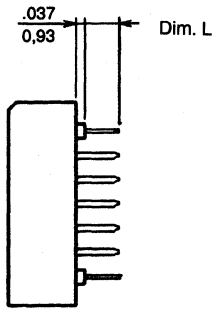
Specifications

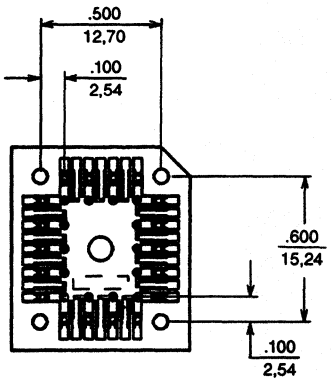
Contact:
Phosphor bronze, tin plated

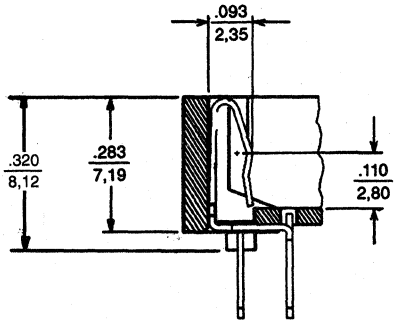
Housing:
PPS

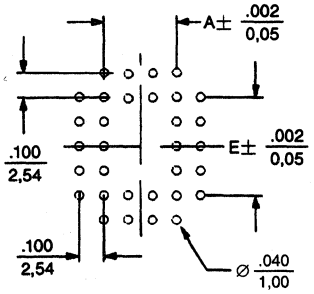












Ordering Information

Order Number Formula
87246- XX X X
Circuit Size •32 Circuit - 32
P.C. Tail length (Dim. L) and Peg Option •0 = .142" without Peg •2 = .125" without Peg 3 = .142" with Peg 5 = .125" with Peg
Plating Code •1 = Pre-plate 150µin/3.81µm min. tin 2 = Post-plate 150µin/3.81µm min. tin

• U.S. Standard Product available through Molex franchised distributors.

PLCC Sockets

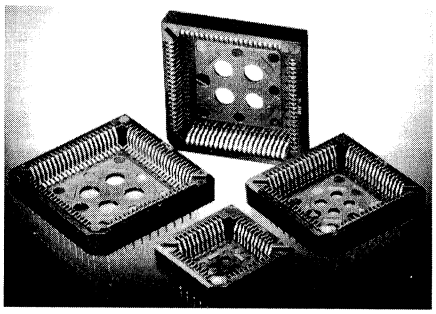
87124 Series

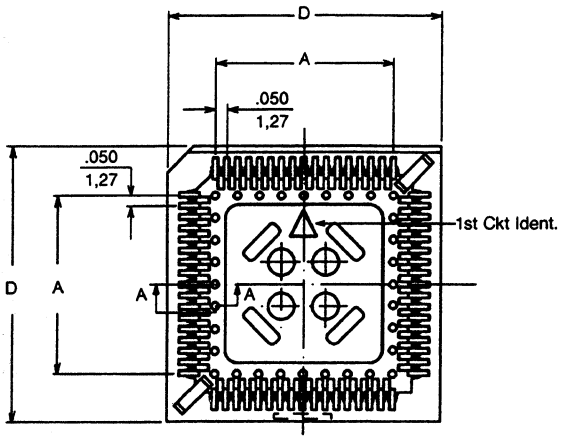
- 44, 68, 84 and 100 circuits
- .100" (2,54mm) center spacing
- Accepts JEDEC Type A square chips
- Raised inner platform with molded stops reduces stress on J-leads
- High normal force
- Packaged in tubes
- Locating peg available
- Black color housing standard, brown color housing available, contact factory

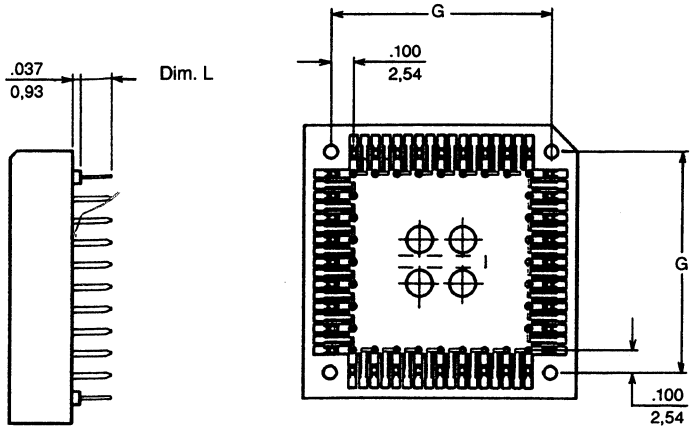
Specifications

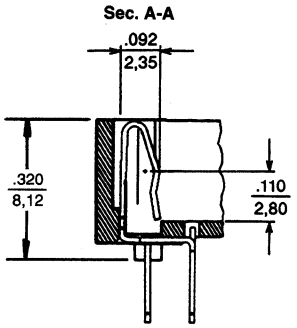
Contact:
Phosphor bronze, tin plated

Housing:
PPS

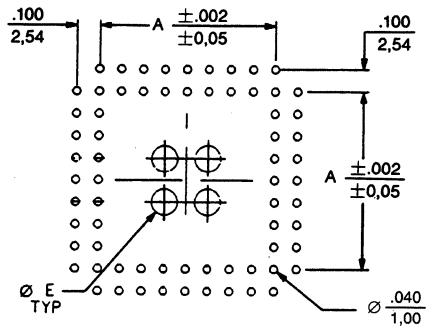








For Circuit Size 44, 68, 84, 100



Recommended P.C.B. Hole Pattern

Ordering Information

Order Number Formula

87124- XX X X

Circuit Size
- 44 Circuits - 44
- 68 Circuits - 68
- 84 Circuits - 84

100 Circuits - 10

P.C. Tail length (Dim. L) and Peg Option
- 0 = .142" without Peg
- 2 = .125" without Peg

3 = .142" with Peg

Plating Code
- 1 = Pre-plate 150µin/3.81µm min. tin

2 = Post-plate 150µin/3.81µm min. tin

- U.S. Standard Product available through Molex franchised distributors.

Dimensions

Circuit	Dim. A	Dim. D	Dim. G
44	.500 12,70	.935 23,76	.700 17,78
68	.800 20,32	1.236 31,40	1.000 25,40
84	1.000 25,40	1.436 36,48	1.200 30,48
100	1.200 30,48	1.636 41,56	1.400 35,56

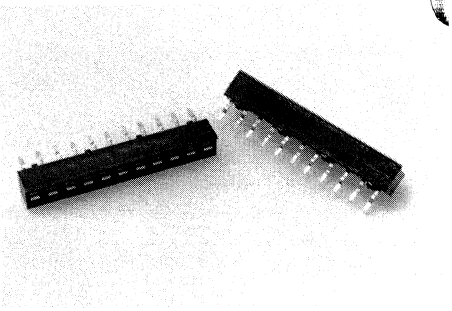
PLCC Extraction Tool Order No. 82048-0000

J

Single-In-Line IC Socket

94100 Series

- Dual beam contact
- Large target entry area for IC leads
- Closed bottom
- P.C. tail retention
- Packaged in tubes



Specifications

Materials:

Housing – 94V-0 glass filled polyester, black

Terminal – Phosphor bronze

Plating – Pre-Tinned, .0002" (0,005mm)

Mechanical:

Insertion Forces – Maximum insertion force per terminal is 296 grams using a .013" (0,33mm) thick x .020" (0,51mm) wide probe

Withdrawal Forces – After 2 cycles with a .013" (0,33mm) thick x .020" (0,51mm) wide probe, the minimum withdrawal force must be 28 grams using a .008" (0,20mm) thick x .015" (0,38mm) wide probe.

Contact Retention in Housing – 400 gram min.

Electrical:

Insulation Resistance – Greater than 500k megohms

Contact Resistance – 15 milliohms max. (initial) 30 milliohms max. (after test)

Rated Voltage – 250 volts

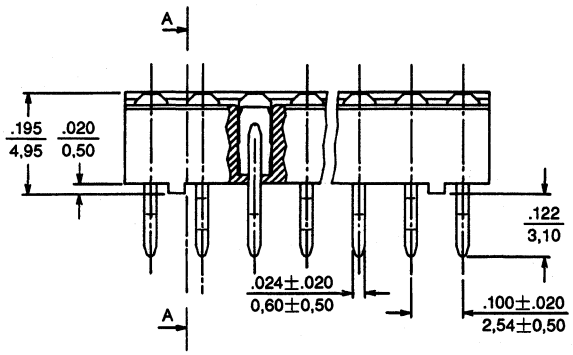
Rated Current – 1 amp max./circuit at 20°C

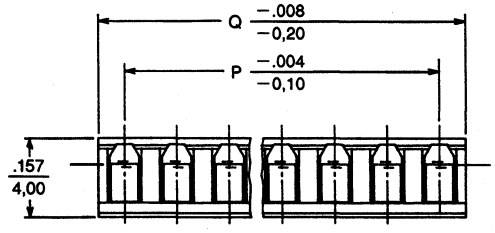
Dielectric Strength – Withstands 1000 volts R.M.S. applied between adjacent terminals for (60) seconds without breakdown

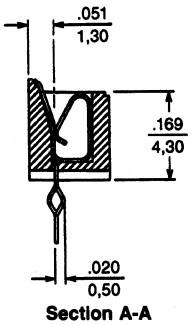
Environmental:

Operating Temperature – −40°C+105°C

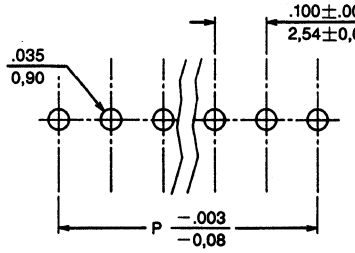
J







Section A-A



Recommended PCB Layout

*) Insertion force into the PCB holes: 50 gr/contact max

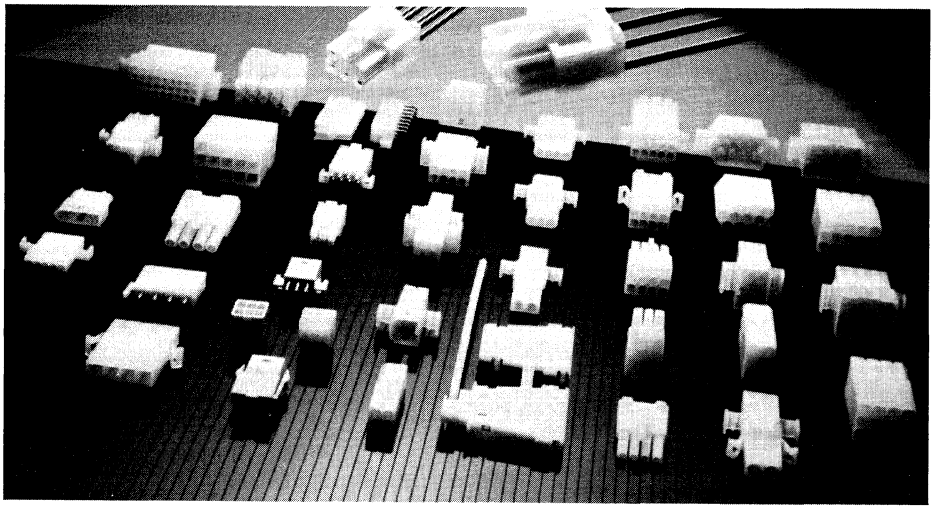
*) Retention force in the PCB holes: 5 gr/contact min

Ordering Information and Dimensions

Order No.	Ckts.	Dimensions P	Dimensions Q	Order No.	Ckts.	Dimensions P	Dimensions Q	Order No.	Ckts.	Dimensions P	Dimensions Q
94100-0107	7	.600 15,24	.700 17,78	94100-0110	10	.900 22,86	1.000 25,40	94100-0114	14	1.300 33,02	1.400 35,56
94100-0108	8	.700 17,78	.800 20,32	94100-0111	11	1.000 25,40	1.100 27,94	94100-0116	16	1.500 38,10	1.600 40,64
94100-0109	9	.800 20,32	.900 22,86	94100-0112	12	1.100 27,94	1.200 30,48	94100-0120	20	1.900 48,26	2.000 50,80

Pin and Socket Connectors and High Current Components

Contents



Pin and Socket Selection Guide 2K-3K

Mini-Fit® Connector Systems

Specifications 4K
Mini-Fit Jr. Wire-to-Wire, Board Mount 5K-11K
Mini-Fit BMI, Blind Mating Interconnect 12K-14K
Mini-Fit TPA, Secondary Locks 15K-16K
Terminals for Mini-Fit Connectors 17K

.093" 2,36mm Diameter

Power Connector Housings 18K-19K
Pin and Socket Wafers and Terminals 20K-21K
Terminals for .093" Dia. Housings 22K-23K

.062" 1,57mm Diameter

Power Connector Housings, Strain Relief 24K-25K
Terminals for .062" Dia. Housings 26K

125" 3,18mm Housings

HCS-125 ..... 27K
.125" Dia. Terminals 28K

.084" 2,13mm Diameter

MLX Series 29K
Terminals 30K

Miscellaneous Special Purpose

Wire Trap LITE 31K-32K
Claspcon Wire-to Board Crimp Terminal Sockets 33K
Strain Relief P.C. Board Terminals 34K
Grounding Clip 35K
A.C. Receptacle 36K
Commoning Connectors 37K
Relay and Switch Connectors, Terminals 38K-39K
Specialty Receptacles for Timers, Coin Changers 40K
Ceramic and Phenolic Range Receptacles 41K
Disk Drive Power Connection Systems 42K-51K
Industry Standard Power Supply Header 52K
Industry Standard Power Supply Connector 53K
21 Position Housings 54K
Terminals for Multi-Contact Housings 55K-60K
High Current Push-On Terminal and Housings 61K-62K

K

Choosing the right power connector

The right power connector will assure the safety and integrity of your electrical and electronic products. Molex's broad line of power connectors allows you the design flexibility to choose **the right connector.** Is your decision driven by the downsizing of your products or the need to add capabilities? Do you require a smaller connector that can carry more current, or a larger connector that can handle heavier gauge wire? Do you want a greater selection of printed circuit board mounted connectors? Molex is your source for the right power connector.

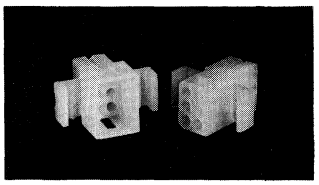
This cross reference was developed to make your selection easier. To assure you the highest performance in your application consider first:

Current Rating (Current Density)
Connector Size (Circuit Density)
Engagement Force
Wire Size
Configuration and Circuit Size
Operating Voltage

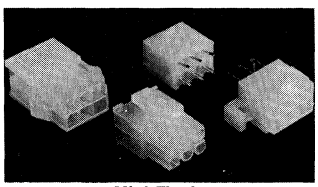
Reference Chart

	STANDARD .062	MINI-FIT, JR.	STANDARD .093	3191 SERIES	HCS-125
Current Density[10]					
amps/ckt. at smallest ckt. size	5	9	12	12	20
at largest ckt. size	4	6	7.5	6	20
Circuit Density					
ckts/in²	31-35	25-31	9-18	11-13	11-14
Operating Voltage - Maximum	250	600	250/600[3]	600	600
Housing Lock Type					
Yes - Positive Lock	36 ckt. only	Yes	2, 3, 4, 5 ckt. only[3]	Yes	Yes
No - Passive Lock (Detent)	Yes	No	Yes	No	No
Wire-To-Wire	Yes	Yes	Yes	Yes	Yes
Header					
Straight	Yes	Yes	Yes[1/9]	Yes[2/9]	No
Right Angle	No	Yes	No	Contact Factory	No
Panel Mount (Mounting Ears)					
Plug	Yes	Yes	Yes	Yes	Yes
Receptacle	Yes	No	Yes	No	No
Connector Engaging Force					
(lbs./ckt.)	2.3	1.54	3.5	3.5	5.75[5]
Connector Disengage Force					
(lbs./ckt.)	0.8	0.7	2.75	2.75	3.4[5]
Fully Isolated Contacts	No	Yes	No	Yes	Yes
Agencies					
UL Recognized	Yes	Yes	Yes	Yes	Yes
CSA Certified	Yes	Yes	Yes	Yes	Yes
TUV Licensed	No	Yes	No	Yes	No
Circuit Size	1, 2, 3, 4, 5, 6, 9, 12, 15, 24, 36	2, 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	1, 2, 3, 4, 5, 6, 9, 12, 15	1, 2, 3, 4, 6, 9, 12, 15	1, 2, 3, 4
Wire Size - AWG	18-24, 24-30	16, 18-24, 22-28	14-20, 18-22 22-24, 24-30	14-20, 18-22 22-24, 24-30	10-14, 16-18
Flammability Rating					
94V-2	Yes	Yes	Yes	Yes	Yes
94V-0	No	Yes	No	Yes	C/F
Strain Relief Available[7/8]	Yes; 3, 9, 15	Yes; 2, 4, 6, 8, 12	Yes; 2, 4, 15	Yes	C/F

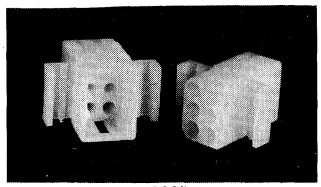
[1]Use 1840 or 3099 header
[2]Use 5219 header
[3]Use 1816 or 6496
[7]Available as a separate component, contact factory
[8]For other sizes contact factory
[9]Use P.C. tail terminal in plug
[10]Based on largest listed wire size, other application factors may affect current density
[11]Low force terminals also available



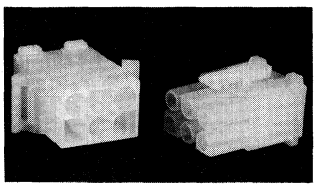
.062"



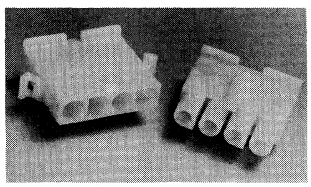
Mini-Fit, Jr.



.093"



3191



HCS-125

Current Rating (Current Density)

Current rating is key to selecting the right connector. It is stated in amperes per circuit with each circuit of the connector carrying the rated current. The rating is based on the current level passing through the terminal resulting in a 30 degree Centigrade (maximum) temperature rise. The current level is then de-rated due to adjacent terminal heating, based on the number of circuits in the housing (insulator).

Connector Size (Current Density)

Circuit density, expressed in circuits per square inch, is a relative measure of the size of a connector as reflected in the number of circuits that can be accommodated in one square inch of real estate. The higher the circuit density, the smaller the connector. Connector size is a major design consideration in printed circuit board applications and where equipment downsizing is required. When a connector is mounted in a panel or bulkhead, size may also be a factor.

Engagement Force

Engagement force, measured in pounds per circuit, is the effort required to mate the plug with the receptacle. Total connector engagement force is approximated by multiplying the number of circuits in the housing by the per circuit engagement force. (Due to other factors, actual force may be somewhat higher.) Engagement force can be a major concern in higher circuit count housings due to potentially high total mating forces, and in printed circuit board applications where high mating forces could damage the printed circuit board. In these cases a connector family with a lower engagement force or a terminal having a lower engagement force within a family should be chosen.

Wire Size

The size of wire to which terminals are crimped is not generally a critical consideration. The Molex connectors listed on this chart will typically accommodate the range of 16-28 AWG. Should your application require a heavier wire gauge (a smaller AWG number) for mechanical strength or current carrying capability, choose a compatible connector family.

Configuration and Circuit Size

Molex power connector families are all available in free-hanging or panel mounted wire-to-wire configurations. Most are also offered in vertical printed circuit board header assembly configurations. PC tail terminals can be used to customize the standard plug with any combination of male and female pc (solder) tail terminals. Right angle header assemblies are also available in some connector families.

Choose the circuit size that meets your specifications based on:

1. current rating
2. number of module-to-module interconnects needed
3. total connector engagement force
4. size of the connector

Operating Voltage

The voltage rating is established by U.L. standards at either 250 or 600 volts. These voltage ratings are RMS values (Root Mean Square) and therefore apply to both AC and DC voltages. Generally the higher voltage ratings are obtained by fully enclosing both the male and female terminals in the housing (insulator). Shrouded housings, or fully isolated contacts also offer protection of the contacts during assembly and handling of your products.

Materials and Plating

Housings are available in nylon with a flammability rating of UL 94V-2 and, in some families, a 94V-0 rating. The higher 94V-0 rating indicates that the material will extinguish itself (in case of fire) more rapidly than the 94V-2 material. A 94V-0 rating does not infer a higher operating temperature rating, but rather a higher resistance to flame continuance.

The standard terminal plating options available for Molex power connectors are tin, tin/lead, and overall or select gold. Tin plating is appropriate for most applications where per circuit currents are above 0.5 amperes. Gold plating should generally be specified in applications where signal or low current lines are used, high mating cycles (>30 cycles) are likely, or within harsh environments. Terminal base materials offered are brass and phosphor bronze. Brass is the standard material and affords an excellent combination of strength and current carrying capability. Phosphor bronze is recommended where:

1. a thinner base material is used to obtain a lower engagement force.
2. high engagement/ disengagement cycles are likely.
3. prolonged exposure to high ambient temperatures are likely.

Mini-Fit Family High Current/High Density Power Connector System

The Mini-Fit Family of High Current/High Density Power Connectors is designed to meet your requirements for an interconnection system with the broadest possible configurations and options. The Mini-Fit Family allows you the greatest design flexibility in your product's interconnection system, allowing you to interconnect:

Mini-Fit, Jr.
- □ Wire to Wire
- □ Wire to Board (vertical header)
- □ Wire to Board (right angle header)

Mini-Fit, BMI
- □ Blind Mating Wire to Wire
- □ Blind Mating Wire to Board (parallel mounting)
- □ Blind Mating Wire to Board (right angle mounting)
- □ Blind Mating Board to Board (parallel boards)
- □ Blind Mating Board to Board (right angle boards)

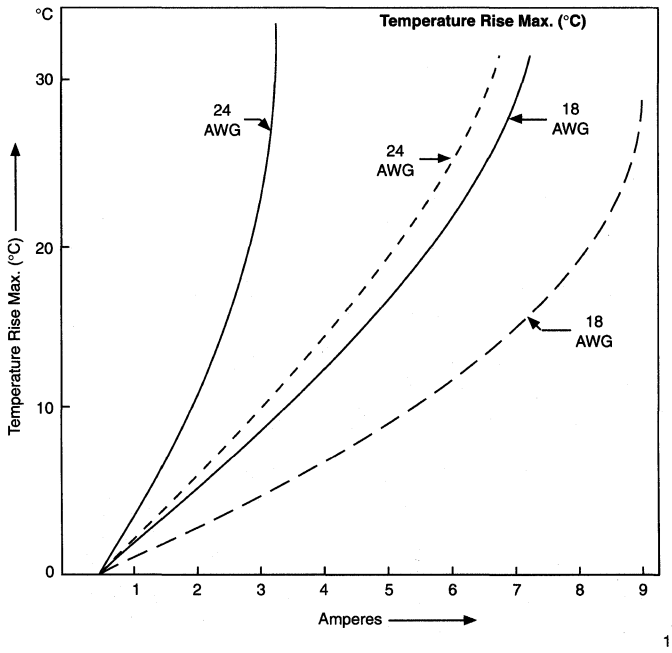
Mini-Fit, TPA
- □ Wire to Wire with Secondary Terminal Retention (TPA)
- □ Wire to Board (vertical header) with TPA
- □ Wire to Board (right angle header) with TPA

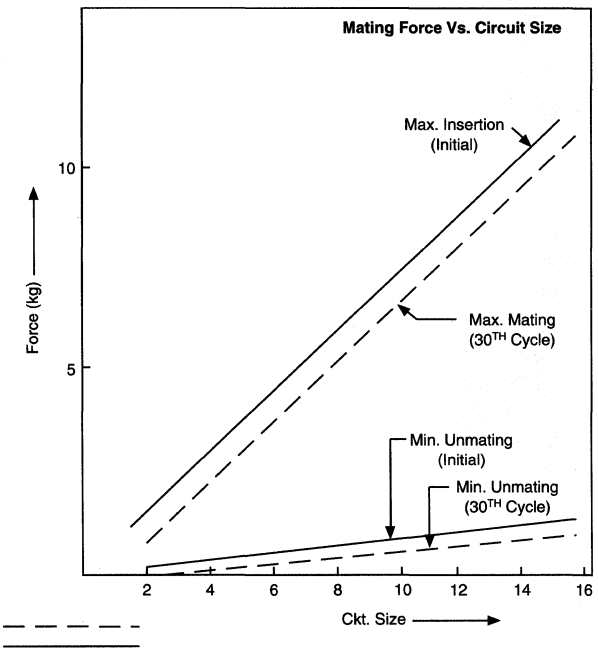
The Mini-Fit, Jr., Mini-Fit, BMI, and Mini-Fit, TPA accept the same terminals and application tooling, further reducing your design and qualification effort.

The Mini-Fit Family also features:

- □ Current rating up to 9 amperes per circuit
- □ 600 volt rating
- □ Positive housing locks
- □ Fully isolated terminals
- □ Low engagement force terminals
- □ Available in 94V-2 and 94V-0 materials
- □ UL recognized, CSA certified, TUV licensed
- □ 10 milliohm contact resistance

UL Recognized, CSA Certified and T.U.V. Licensed





Specifications:

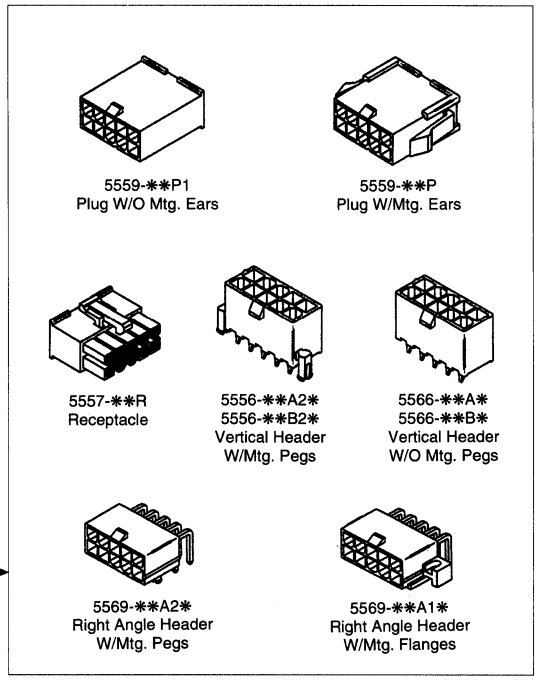
Material:
Terminal — Brass or Phosphor Bronze
Plating — Tin or Select Gold
Housing — UL 94V-0 nylon 6/6 or UL 94V-2 nylon 6/6, or UL 94V-0 polyester. See product listing for details.

Mechanical:
Temperature Rise — (Carrying rated current load) 30°C max.
Mating Force — **0.7 kg./** 1.54 lbs. per circuit max.
Unmating Force — **0.35 kg./**.7 lbs. per circuit min. initial

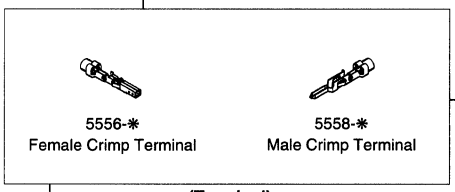
Electrical:
Voltage Rating — 600 (RMS)
Current Rating — 9 amps - 2, 3 circuits
8 amps - 4, 5 and 6 circuits
7 amps - 8 and 10 circuits
6 amps - 12, 14, 16, 18, 20, 22 and 24 circuits
Contact Resistance — 10mΩ max.
Insulation Resistance — 1,000 MΩ min.
Dielectric Strength — 1,500V ac

Mini-Fit Family

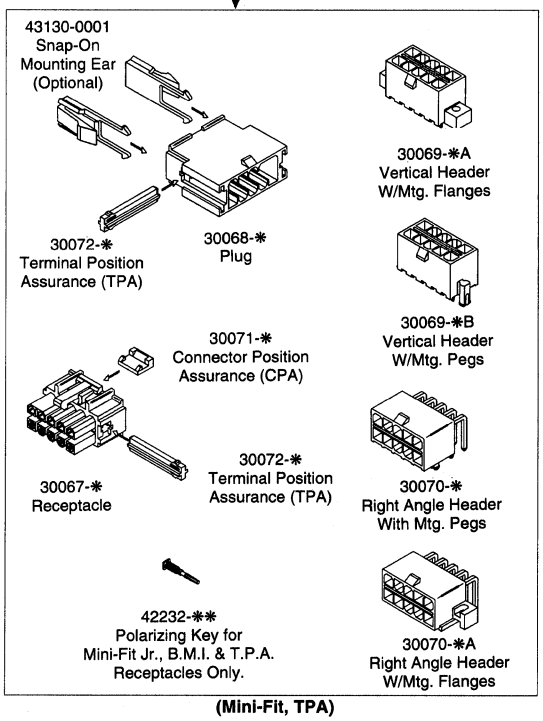
- High current/high density
- 10 milliohm contact resistance
- Standardization allows for reduced inventories
- Terminal standardization reduces tooling changeovers
- Increases manufacturing flexibility
- Simplifies PC board layouts



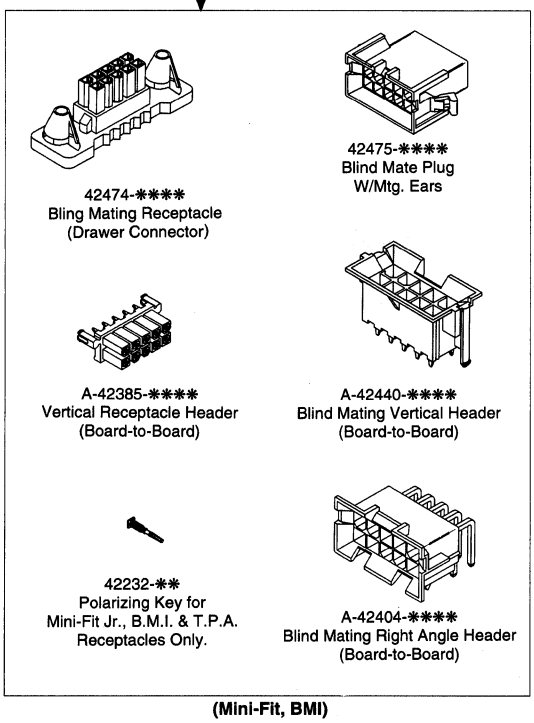
(Mini-Fit, Jr.)



(Terminal)



(Mini-Fit, TPA)



(Mini-Fit, BMI)

K

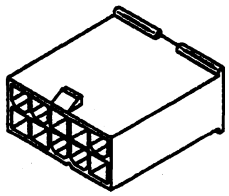
Mini-Fit, Jr.

The Mini-Fit, Jr. Series is designed for high current/high density applications which require the design flexibility of wire to wire and wire to board configurations in the interconnection system. The Mini-Fit, Jr. is appropriate for both power and signal applications as it can carry currents of up to 9 amperes/circuit and has a 10 milliohm contact resistance.

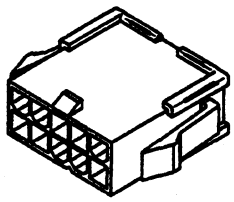
- Current rating up to 9 amperes per circuit
- 600 volt rating
- 10 milliohm contact resistance
- Positive housing locks
- Fully isolated terminals
- Low engagement force terminals
- Available in 94V-2 and 94V-0 materials
- Available in 2 thru 24 circuit housings
- UL File No. E-29179, CSA File No. 19890, TUV Licensed
- Uses standard Mini-Fit series terminals



5556-*
Female Crimp Terminal



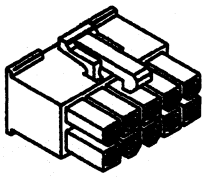
5559-**P1
Plug W/O Mtg. Ears



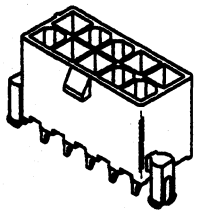
5559-**P
Plug W/Mtg. Ears



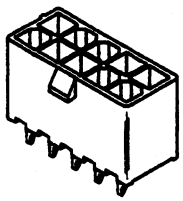
5558-*
Male Crimp Terminal



5557-**R
Receptacle



5556-**A2*
5556-**B2*
Vertical Header
W/Mtg. Pegs

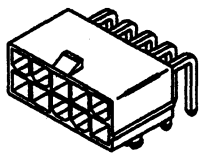


5566-**A*
5566-**B*
Vertical Header
W/O Mtg. Pegs

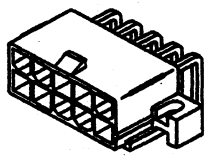
(With and Without Drain Holes)



42232-**
Polarizing Key
(For use with
Standard Plugs
and Receptacles)



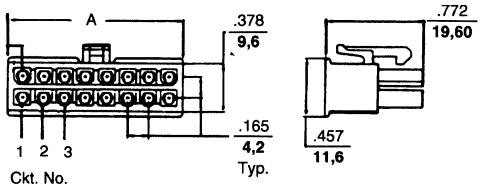
5569-**A2*
Right Angle Header
W/Mtg. Pegs



5569-**A1*
Right Angle Header
W/Mtg. Flanges

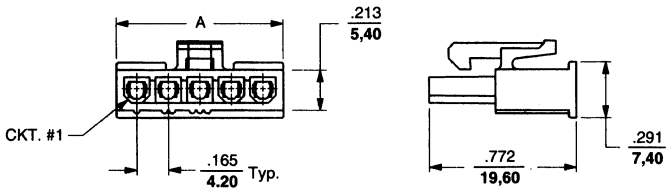
Mini-Fit, Jr.

5557-NR Housing, Dual Row
Uses 5556 Terminal



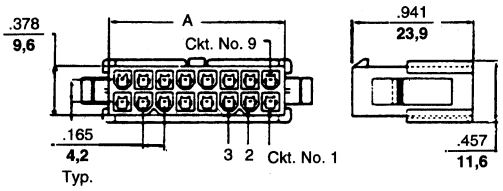
Mating Side Shown

5557-NR2 Housing, Single Row
Uses 5556 Terminal



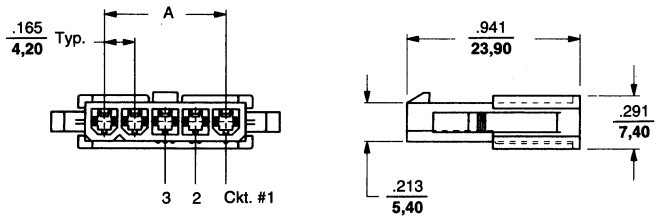
Mating Side Shown

5559-NP Housing, Dual Row
Uses 5558 Terminal

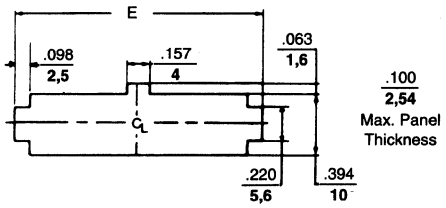


Mating Side Shown

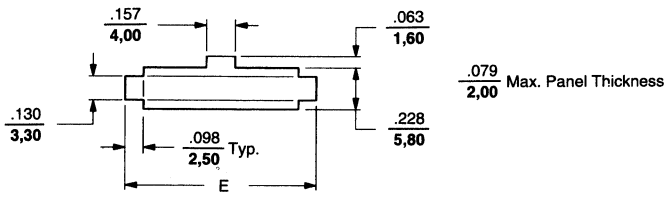
5559-NLP2 Housing, Single Row
Uses 5558 Terminal



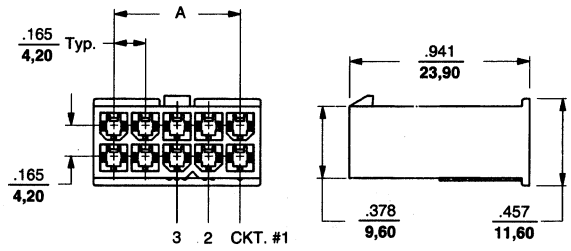
Mounting Hole Details for
5559-NP Housing
Dual Row



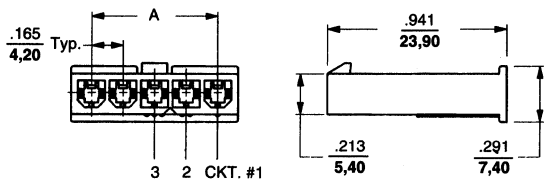
Mounting Hole Details for
5559-NLP2 Housing
Single Row



5559-NP1 Housing, Dual Row
Uses 5558 Terminal



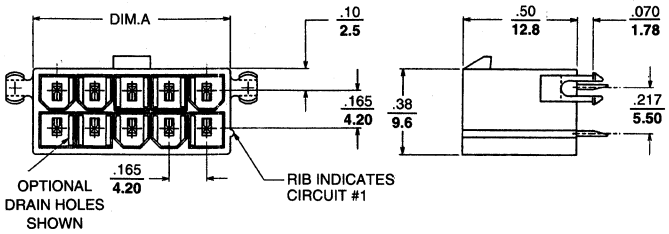
5559-NLP3 Housing, Single Row
Uses 5558 Terminal



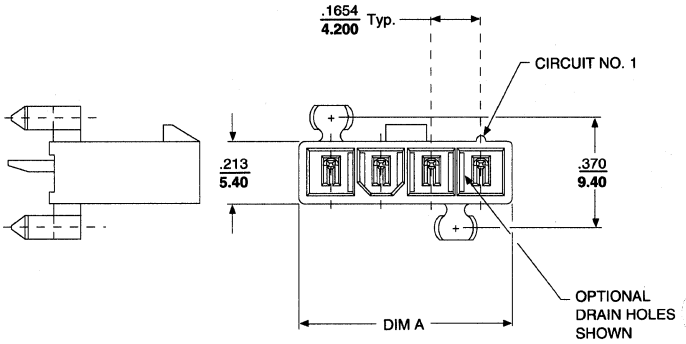
K

Mini-Fit, Jr.

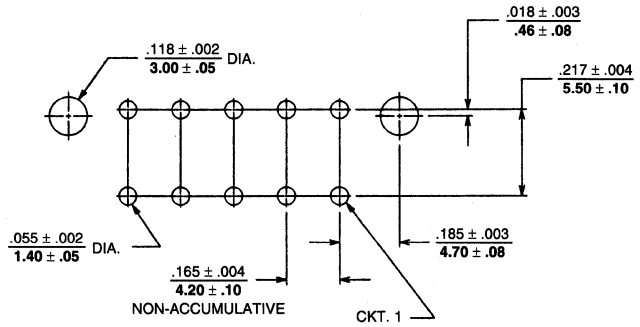
A-5566-N*2 Vertical Header, Dual Row
Peg Mounted



A-5566-NL3 Vertical Header, Single Row
Not Available Without Pegs

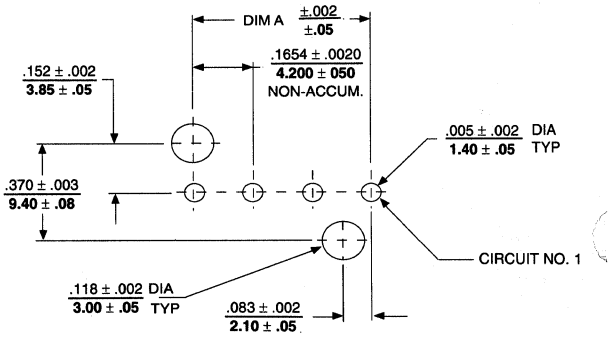


Vertical Header w/Pegs
P.C. Board Layout



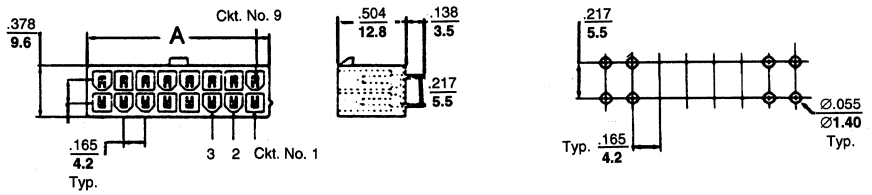
RECOMMENDED HOLE LAYOUT FOR .070/1.78 MAX. THICK P.C. BOARD

PC Board Layout for
A-5566-NL3 Vertical Header



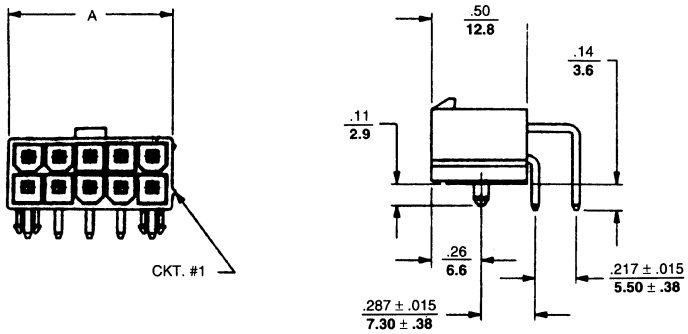
RECOMMENDED HOLE LAYOUT FOR .070/1.78 MAX. THICK P.C. BOARD

Vertical Header w/o Pegs
P.C. Board Layout

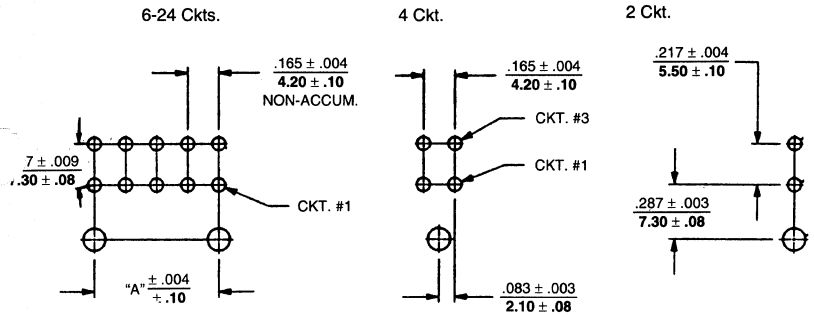


Mini-Fit, Jr.

A-5569-NA2 Right Angle Header, Dual Row
Peg Mounted

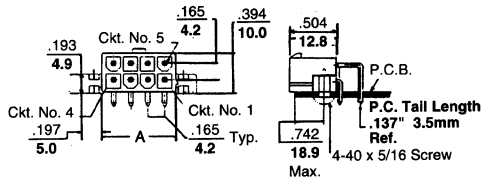


PC Board Layout for A-5569-NA2

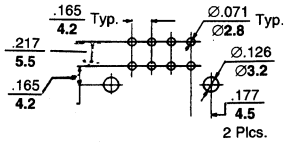


RECOMMENDED HOLE LAYOUT FOR
.070/1.78 MAX. THICK P.C. BOARD

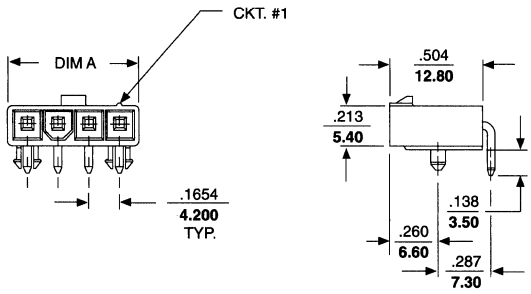
A-5569-NA1 Right Angle Header, Dual Row
Flange Mounted Version



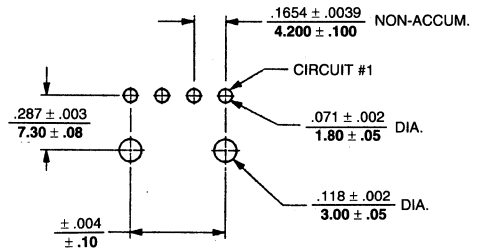
**Right Angle Header w/
Flanges P.C. Board Layout**



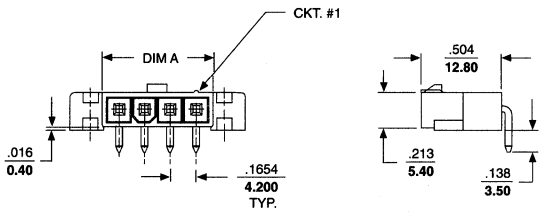
A-5569-NL4 Right Angle Header, Single Row
Peg Mounted



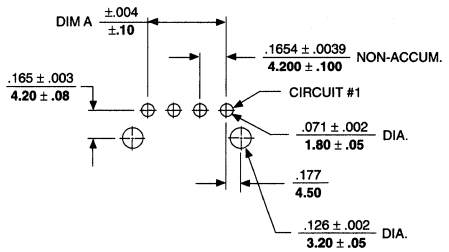
PC Board Layout for A-5569-NL4



A-5569-NL3 Right Angle Header, Single Row
Screw Mount



PC Board Layout for A-5569-NL3



RECOMMENDED HOLE LAYOUT FOR
.070/1.78 MAX. THICK P.C. BOARD

K

Mini-Fit, Jr.

Ordering Information (Vertical Shading Indicates Single Row Version)

			Single Row			Dual Row			
Circuit Size			**3**	**4**	**5**	**2**	**4**	**6**	**8**
Amperes/Circuit (Max)*			9	9	8	9	8	8	7
Voltage Rating (Max)*			600	600	600	600	600	600	600
Dim. A		inch	.543	.709	.874	.213	.378	.543	.709
		mm	**13,8**	**18,0**	**22,2**	**5,4**	**9,6**	**13,8**	**18,0**
Receptacle (5557-NR*) uses female terminal 5556									
	94V-2		•39-01-4030	•39-01-4040	•39-01-4050	•39-01-2020	•39-01-2040	•39-01-2060	•39-01-2080
	94V-0		•39-01-4031	•39-01-4041	•39-01-4051	•39-01-2025	•39-01-2045	•39-01-2065	•39-01-2085
Plug (5559-NP*) uses male terminal 5558									
Panel Mount	94V-2		•39-01-4032	—	•39-01-4052	•39-01-2021	•39-01-2041	•39-01-2061	•39-01-2081
	94V-0		•39-01-4033	—	•39-01-4053	•39-01-2026	•39-01-2046	•39-01-2066	•39-01-2086
Free Hanging	94V-2		•39-01-4036	•39-01-4046	•39-01-4056	•39-01-3023	•39-01-3043	•39-01-3063	•39-01-3083
	94V-0		•39-01-4037	—	•39-01-4057	•39-01-3029	•39-01-3049	•39-01-3069	•39-01-3089
Panel Cutout		inch	.756	.921	1.087	.425	.591	.756	.921
Dim. E		mm	**19,2**	**23,4**	**27,6**	**10,8**	**15,0**	**19,2**	**23,4**
Strain Relief (41995)**			—	—	—	•15-04-0340	•15-04-0294	•15-04-0296	•15-04-0343
Polarizing Key (42232)			• 15-04-0211	Use with 5557 Receptacle Housing					
Vertical Header (5566-N) Tin Plated**									
	PCB Pegs	**Drain Holes**							
94V-2	No	No	Not Available	Not Available	Not Available	•39-28-1023	•39-28-1043	•39-28-1063	•39-28-1083
94V-0	No	No	Not Available	Not Available	Not Available	•39-28-8020	•39-28-8040	•38-28-8060	•39-28-8080
94V-2	No	Yes	Not Available	Not Available	Not Available	•39-29-3026	•39-29-3046	•39-29-3066	•39-29-3086
94V-0	No	Yes	Not Available	Not Available	Not Available	•39-31-0020	•39-31-0040	•39-31-0060	•39-31-0080
94V-2	Yes	No	•39-30-1039	—	—	•39-29-9023	•39-29-9043	•39-29-9063	•39-29-9083
94V-0	Yes	No	•39-30-2030	—	39-30-2050	•39-29-9027	•39-29-9047	•39-29-9067	•39-29-9087
94V-2	Yes	Yes	•39-30-2035	—	—	•39-29-9022	•39-29-9042	•39-29-9062	•39-29-9082
94V-0	Yes	Yes	•39-30-2036	—	39-30-2056	•39-29-9026	•39-29-9046	•39-29-9066	•39-29-9086
Vertical Header (5566-N*) Gold Plated (30 Microinch)									
	PCB Pegs	**Drain Holes**							
94V-2	No	No	Not Available	Not Available	Not Available	•39-29-0023	•39-29-0043	•39-29-0063	•39-29-0083
94V-0	No	No	Not Available	Not Available	Not Available	•39-29-6028	•39-29-6048	•39-29-6068	•39-29-6088
94V-2	No	Yes	Not Available	Not Available	Not Available	•39-31-0027	•39-31-0047	•39-31-0067	•39-31-0087
94V-0	No	Yes	Not Available	Not Available	Not Available	•39-31-0028	•39-31-0048	•39-31-0068	•39-31-0088
94V-2	Yes	No	•39-30-2031	—	—	•39-29-9025	•39-29-9045	•39-29-9065	•39-29-9085
94V-0	Yes	No	•39-30-2032	—	• 39-30-2052	•39-29-9029	•39-29-9049	•39-29-9069	•39-29-9089
94V-2	Yes	Yes	•39-30-2037	—	—	•39-29-9024	•39-29-9044	•39-29-9064	•39-29-9084
94V-0	Yes	Yes	•39-30-2038	—	• 39-30-2058	•39-28-9028	•39-28-9048	•39-28-9068	•39-28-9088
Right Angle Header (5569-N) Tin Plated**									
94V-2	PCB Flanges		•39-30-3031	—	—	•39-29-1028	•39-29-1048	•39-29-1068	•39-29-1088
94V-0	PCB Flanges		•39-30-3032	—	—	•39-29-1027	•39-29-1047	•39-29-1067	•39-29-1087
94V-2	PCB Pegs		•39-30-3035	•39-30-3045	•39-30-3055	•39-30-1020	•39-30-1040	•39-30-1060	•39-30-1080
94V-0	PCB Pegs		•39-30-3036	—	•39-30-3056	•39-30-0020	•39-30-0040	•39-30-0060	•39-30-0080
Right Angle Header (5569-N) Gold Plated (30 Microinch)**									
94V-2	PCB Flanges		•39-30-3033	—	—	•39-29-5023	•39-29-5043	•39-29-5063	•39-29-5083
94V-0	PCB Flanges		•39-30-3034	—	—	•39-29-4029	•39-29-4049	•39-29-4069	•39-29-4089
94V-2	PCB Pegs		•39-30-3037	•39-30-3047	•39-30-3057	•39-30-1021	•39-30-1041	•39-30-1061	•39-30-1081
94V-0	PCB Pegs		•39-30-3038	—	•39-30-3058	•39-30-1022	•39-30-1042	•39-30-1062	•39-30-1082

** Strain relief accepts both plug and receptacle. Requires use of "Free Hanging" Plug (w/o ears).
Accepts standard receptacle in sizes 6-24. For 2 or 4 circuit, strain relief uses receptacle Order No. 39-01-3**XX**2 (94V-2) or 39-01-3**XX**8 (94V-0).

• U.S. Standard Product, available through Molex franchised distributors.

* Rating based on fully loaded housings.

Mini-Fit, Jr.

Ordering Information

			Dual Row							
Circuit Size			**10**	**12**	**14**	**16**	**18**	**20**	**22**	**24**
Amperes/Circuit (Max)*			7	6	6	6	6	6	6	6
Voltage Rating (Max)*			600	600	600	600	600	600	600	600
Dim. A		inch	.874	1.039	1.205	1.370	1.535	1.700	1.865	2.030
		mm	**22,2**	**26,4**	**30,6**	**34,8**	**39,0**	**43,2**	**47,4**	**51,6**
Receptacle (5557-NR*) uses female terminal 5556										
	94V-2		•39-01-2100	• 39-01-2120	• 39-01-2140	• 39-01-2160	• 39-01-2180	•39-01-2200	• 39-01-2220	• 39-01-2240
	94V-0		•39-01-2105	• 39-01-2125	• 39-01-2145	•39-01-2165	• 39-01-2185	•39-01-2205	• 39-01-2225	• 39-01-2245
Plug (5559-NP*) uses male terminal 5558										
Panel Mount	94V-2		•39-01-2101	• 39-01-2121	• 39-01-2141	• 39-01-2161	39-01-2181	—	—	—
	94V-0		•39-01-2106	• 39-01-2126	• 39-01-2146	• 39-01-2166	—	—	—	—
Free Hanging	94V-2		•39-01-3103	• 39-01-3123	• 39-01-3143	• 39-01-3163	—	—	—	—
	94V-0		•39-01-3109	• 39-01-3129	• 39-01-3149	• 39-01-3169	—	—	—	—
Panel Cutout Dim. E		inch	1.087	1.252	1.417	1.583	1.748			
		mm	**27,6**	**31,8**	**36,0**	**40,2**	**44,4**			
Strain Relief (41995)**			—	• 15-04-0345	—	—	—	—	—	—
Polarizing Key (42232)										
Vertical Header (5566-N) Tin Plated**										
	PCB Pegs	**Drain Holes**								
94V-2	No	No	•39-28-1103	• 39-28-1123	• 39-28-1143	• 39-28-1163	• 39-28-1183	• 39-28-1203	• 39-28-1223	• 39-28-1243
94V-0	No	No	•39-28-8100	• 39-28-8120	• 39-28-8140	• 39-28-8160	• 39-28-8180	• 39-28-8200	• 39-28-8220	39-28-8240
94V-2	No	Yes	•39-29-3106	• 39-29-3126	• 39-29-3146	• 39-29-3166	—	—	—	—
94V-0	No	Yes	•39-31-0100	• 39-31-0120	• 39-31-0140	• 39-31-0160	—	—	—	—
94V-2	Yes	No	•39-29-9103	• 39-29-9123	• 39-29-9143	• 39-29-9163	• 39-29-9183	• 39-29-9203	—	• 39-29-9243
94V-0	Yes	No	•39-29-9107	• 39-29-9127	• 39-29-9147	• 39-29-9167	• 39-29-9187	• 39-29-9207	—	• 39-29-9247
94V-2	Yes	Yes	•39-29-9102	• 39-29-9122	• 39-29-9142	• 39-29-9162	• 39-29-9182	• 39-29-9202	—	• 39-29-9242
94V-0	Yes	Yes	•39-29-9106	• 39-29-9126	• 39-29-9146	• 39-29-9166	• 39-29-9186	• 39-29-9206	—	• 39-29-9246
Vertical Header (5566-N*) Gold Plated (30 Microinch)										
	PCB Pegs	**Drain Holes**								
94V-2	No	No	•39-29-0103	• 39-29-0123	• 39-29-0143	• 39-29-0163	• 39-29-0183	• 39-29-0203	• 39-29-0223	• 39-29-0243
94V-0	No	No	•39-29-6108	• 39-29-6128	• 39-29-6148	• 39-29-6168	• 39-29-6188	• 39-29-6208	• 39-29-6223	• 39-29-6243
94V-2	No	Yes	•39-31-0107	• 39-31-0127	• 39-31-0147	• 39-31-0167	—	—	—	—
94V-0	No	Yes	•39-31-0108	• 39-31-0128	• 39-31-0148	• 39-31-0168	—	—	—	—
94V-2	Yes	No	•39-29-9105	• 39-29-9125	• 39-29-9145	• 39-29-9165	• 39-29-9185	• 39-29-9205	—	• 39-29-9245
94V-0	Yes	No	•39-29-9109	• 39-29-9129	• 39-29-9149	• 39-29-9169	• 39-29-9189	• 39-29-9209	—	• 39-29-9249
94V-2	Yes	Yes	•39-29-9104	• 39-29-9124	• 39-29-9144	• 39-29-9164	• 39-29-9184	• 39-29-9204	—	• 39-29-9244
94V-0	Yes	Yes	•39-28-9108	• 39-28-9128	• 39-28-9148	• 39-28-9168	• 39-29-9188	• 39-29-9208	—	• 39-29-9248
Right Angle Header (5569-N) Tin Plated**										
94V-2	PCB Flanges		•39-29-1108	• 39-29-1128	• 39-29-1148	• 39-29-1168	• 39-29-1188	•39-29-1208	• 39-29-1228	• 39-29-1248
94V-0	PCB Flanges		•39-29-1107	• 39-29-1127	• 39-29-1147	• 39-29-1167	• 39-29-1187	•39-29-1207	• 39-29-1227	• 39-29-1247
94V-2	PCB Pegs		•39-30-1100	• 39-30-1120	• 39-30-1140	• 39-30-1160	—	• 39-30-1200	—	—
94V-0	PCB Pegs		•39-30-0100	• 39-30-0120	• 39-30-0140	• 39-30-0160	—	• 39-30-0200	—	—
Right Angle Header (5569-N) Gold Plated (30 Microinch)**										
94V-2	PCB Flanges		•39-29-5103	• 39-29-5123	• 39-29-5143	• 39-29-5163	• 39-29-5183	• 39-29-5203	• 39-29-5223	• 39-29-5243
94V-0	PCB Flanges		•39-29-4109	• 39-29-4129	• 39-29-4149	• 39-29-4169	• 39-29-4189	• 39-29-4209	• 39-29-4229	• 39-29-4249
94V-2	PCB Pegs		•39-30-1101	• 39-30-1121	• 39-30-1141	• 39-30-1161	—	• 39-30-1201	—	—
94V-0	PCB Pegs		•39-30-1102	• 39-30-1122	• 39-30-1142	• 39-30-1162	—	• 39-30-1202	—	—

** Strain relief accepts both plug and receptacle. Requires use of "Free Hanging" Plug (w/o ears).
Accepts standard receptacle in sizes 6-24. For 2 or 4 circuit, strain relief uses receptacle Order No. 39-01-3**XX**2 (94V-2) or 39-01-3**XX**8 (94V-0).

• U.S. Standard Product, available through Molex franchised distributors.

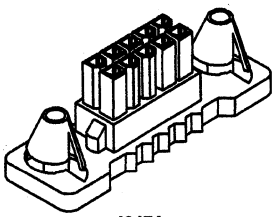
* Rating based on fully loaded housings.

K

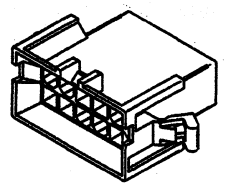
Mini-Fit, BMI
Blind Mating Interconnect

The Mini-Fit, BMI is designed for high current/high density applications requiring the blind mating of modules, sub-assemblies or printed circuit boards. The Mini-Fit, BMI allows a misalignment of up to .100". It is appropriate for both power and signal applications as it can carry currents of up to 9 amperes/circuit and has a 10 milliohm contact resistance.

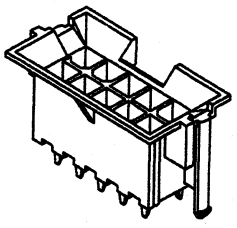
- Blind mating wire-to-wire
- Blind mating wire-to-board (parallel mounting)
- Blind mating wire-to-board (right angle mounting)
- Blind mating board-to-board (parallel stacked boards)
- Blind mating board-to-board (right angle boards)
- Current rating up to 9 amperes per circuit
- 600 volt rating
- Positive housing locks to mate with Mini-Fit, Jr.
- Fully isolated terminals
- Low engagement force terminals
- Available in 94V-2 and 94V-0 materials
- UL recognized, CSA certified, TUV licensed
- Uses standard Mini-Fit series terminals



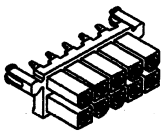
42474
Blind Mating Receptacle
(Drawer Connector)



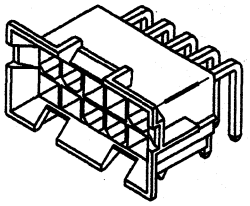
42475
Blind Mate Plug
w/Mounting Ears



A-42440
Blind Mating Vertical Header



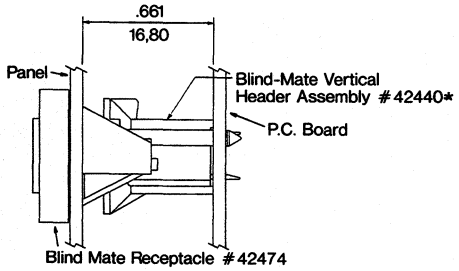
A-42385
Vertical Receptacle Header
(Board-to-Board)



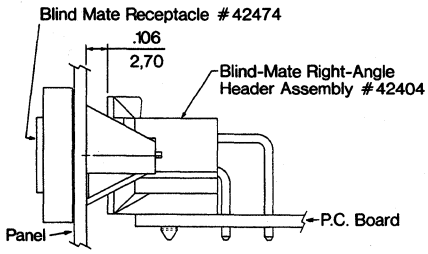
A-42404
Blind Mating Right Angle Header

K

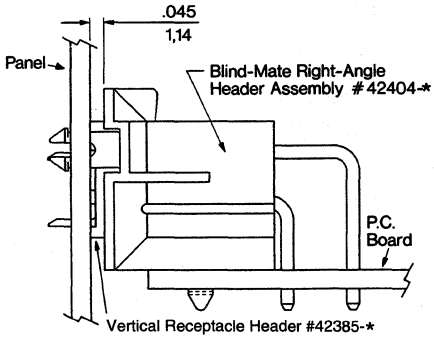
Blind Mating Configurations (Shown Mated)



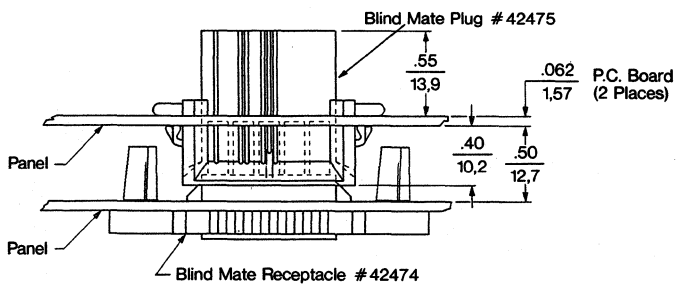
Wire-to-Board (Parallel Mounting)



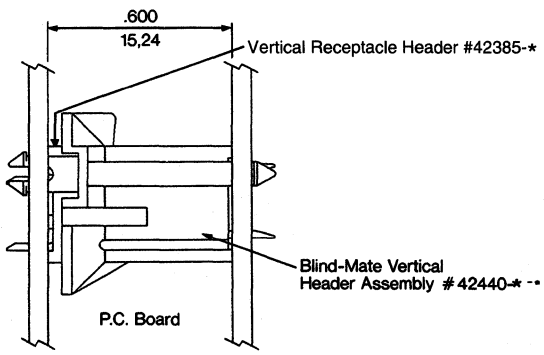
Wire-to-Board (Right Angle Mounting)



Board-to-Board (Right Angle Boards)

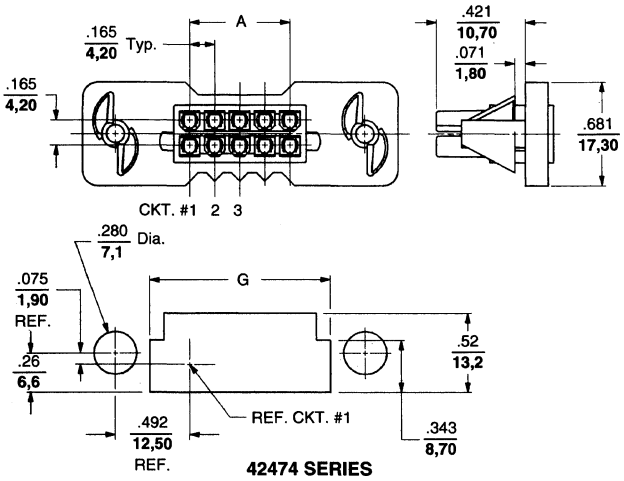


Wire-to-Wire

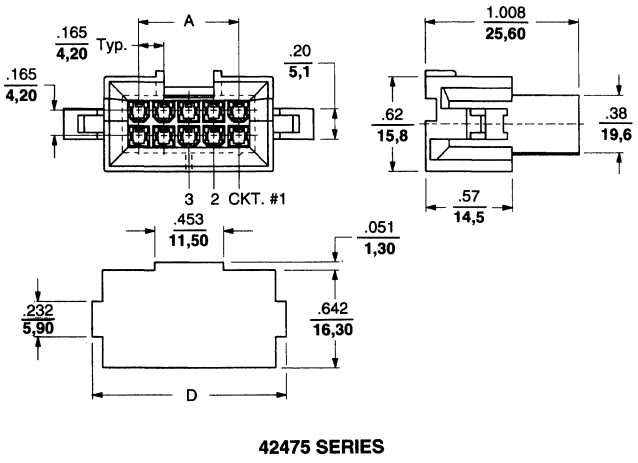


Board-to-Board (Parallel Boards)

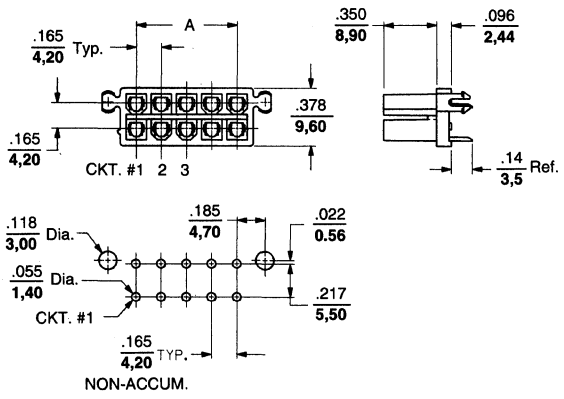
Mini-Fit, BMI



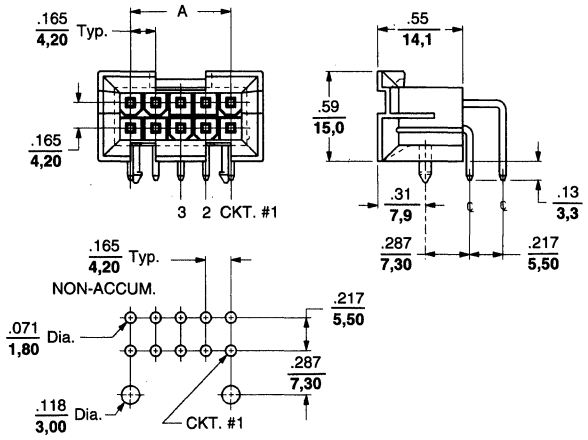
42474 SERIES



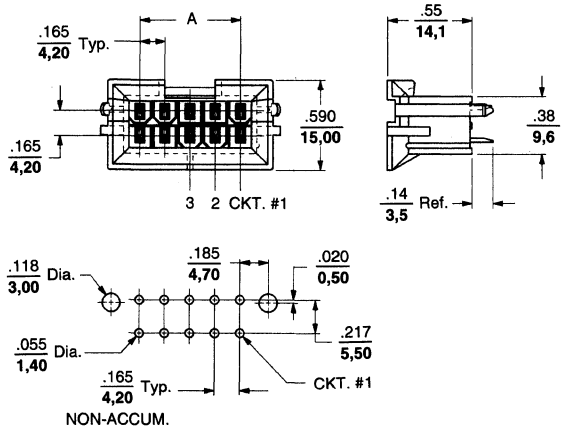
42475 SERIES



42385 SERIES



42404 SERIES



42440 SERIES

Mini-Fit, BMI

Ordering Information

Circuit Size	4	6	10	14	18	24
Amperes/Circuits (Max.)	8	8	7	6	6	6
Voltage Rating (Max.)	600	600	600	600	600	600
Dim. "A" inches	.165	.330	.660	.990	1.320	1.815
mm	**4,2**	**8,4**	**16,8**	**25,2**	**33,6**	**46,2**
Receptacle - Panel Mounted (42474). Use 5556 Terminal						
94V-2	•15-06-0040	•15-06-0060	•15-04-0431	•15-06-0140	•15-06-0180	•15-06-0240
94V-0	•15-06-0041	•15-06-0061	•15-06-0101	•15-06-0141	•15-06-0181	•15-06-0241
Panel Cutout "G"	.693 **17,60**	.858 **21,80**	1.190 **30,23**	1.520 **38,60**	1.850 **47,00**	2.346 **59,60**
Receptacle - Header Assembly (42385)						
94V-2 Tin Plated	•15-24-7040	•15-24-7060	•15-24-7100	•15-24-7140	•15-24-7180	•15-24-7240
94V-0	•15-24-7041	•15-24-7061	•15-24-7101	•15-24-7141	•15-24-7181	•15-24-7241
94V-2 Gold Plated	•15-24-7042	•15-24-7062	•15-24-7102	•15-24-7142	•15-24-7182	•15-24-7242
94V-0	•15-24-7043	•15-24-7063	•15-24-7103	•15-24-7143	•15-24-7183	•15-24-7243
Plug - Panel Mounted (42475). Use 5558 Terminal						
94V-2	•15-06-0045	•15-06-0065	•15-06-0105	•15-06-0145	•15-06-0185	•15-06-0245
94V-0	•15-06-0046	—	•15-06-0106	•15-06-0146	•15-06-0186	•15-06-0246
Panel Cutout "D"	.779 **19,80**	.945 **24,00**	1.276 **32,40**	1.606 **40,80**	1.937 **49,20**	2.443 **61,80**
Vertical Header (42440)						
94V-2 Tin Plated	•15-24-6041	—	•15-24-6101	•15-24-6141	•15-24-6181	•15-24-6241
94V-0	•15-24-6042	—	•15-24-6102	•15-24-6142	•15-24-6182	•15-24-6242
94V-2 Gold Plated	•15-28-6041	—	•15-28-6101	•15-28-6141	•15-28-6181	•15-28-6241
94V-0	•15-28-6042	—	•15-28-6102	•15-28-6142	•15-28-6182	•15-28-6242
94V-2 Tin Plated/Drain Holes	•15-24-6046	—	•15-24-6106	•15-24-6146	•15-24-6186	•15-24-6246
94V-0	•15-24-6047	—	•15-24-6107	•15-24-6147	•15-24-6187	•15-24-6247
92V-2 Gold Plated/Drain Holes	•15-28-6046	—	•15-28-6106	•15-28-6146	•15-28-6186	•15-28-6246
94V-0	•15-28-6047	—	•15-28-6107	•15-28-6147	•15-28-6187	•15-28-6247
Right Angle Header (42404)						
94V-2 Tin Plated	•15-24-6040	•15-24-6060	•15-24-6100	•15-24-6140	•15-24-6180	•15-24-6240
94V-0	•15-24-9044	•15-24-9064	•15-24-9104	•15-24-9144	•15-24-9184	•15-24-9244
94V-2 Gold Plated	•15-24-9043	•15-24-9063	•15-24-9103	•15-24-9143	•15-24-9183	•15-24-9243
94V-0	•15-24-9045	•15-24-9065	•15-24-9105	•15-24-9145	•15-24-9185	•15-24-9245

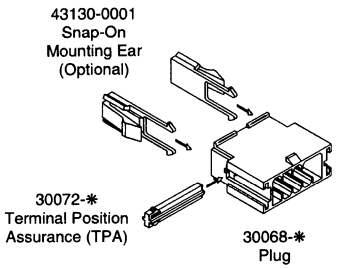
All gold plating is 30 microinch post-plated unless stated otherwise.

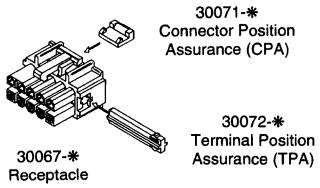
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Mini-Fit, TPA Series

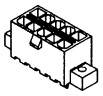
The Mini-Fit, TPA Series is designed for high current/high density applications which require a redundant terminal retention feature. This feature allows a highly visible indication that the terminal is fully seated in the housing and assures that it will not back-out of the housing. The Mini-Fit, TPA also features a connector position assurance (CPA) lock that assures that the housing cannot be inadvertently disengaged.

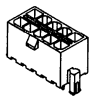
- Wire to Wire with secondary terminal retention (TPA)
- Wire to Board (vertical header) with TPA
- Wire to Board (right angle header) with TPA
- Current rating up to 9 amperes per circuit
- 600 volt rating
- Positive housing locks
- Fully isolated terminals
- Low engagement force terminals
- Available in 94V-0 black polyester material
- UL File No. E-29179, CSA File No. 19980
- Uses standard Mini-Fit Series terminals
- Contrasting color TPA/CPA for high visibility (white)

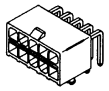


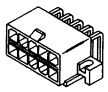



42232-**
Polarizing Key for
Mini-Fit Jr., B.M.I. & T.P.A.
Receptacles Only.


30069-*A
Vertical Header
W/Mtg. Flanges


30069-*B
Vertical Header
W/Mtg. Pegs


30070-*
Right Angle Header
With Mtg. Pegs


30070-*A
Right Angle Header
W/Mtg. Flanges

Ordering Information

PCB Layouts on next page

Circuit Size	2	4	6	8	10	12	14	16
Amperes/Circuit (Max.)†	9	8	8	7	7	6	6	6
Voltage Rating	600	600	600	600	600	600	600	600
Dim. A inch / mm	.213 5,4	.378 9,6	.543 13,8	.709 18,0	.874 22,2	1.039 26,40	1.205 30,6	1.370 34,8
Dim. B inch / mm	.467 11,86	.467 11,86	.633 16,08	.798 20,27	.963 24,46	1.129 26,68	1.294 32,87	1.459 37,06
Receptacle 30067								
	15-97-5021*	15-97-5041*	15-97-5061*	15-97-5081	15-97-5101	15-97-5121	—	15-97-5161
Plug 30068								
	15-97-6021*	15-97-6041	15-97-6061	15-97-6081	15-97-6101	15-97-6121	—	15-97-6161
Vertical Header 30069 Tin Plated (Gold Plating Available)								
Flange Mount (-XA)	15-97-7022	15-97-7042	15-97-7062	15-97-7082	15-97-7102	15-97-7122	—	15-97-7162
Peg Mount (-XB)			15-97-7063					
Right Angle Header 30070 Tin Plated (Gold Plating Available)								
Flange Mount (-XA)	15-97-8022	15-97-8042	15-97-8062	15-97-8082	15-97-8102	15-97-8122	—	15-97-8162
Peg Mount (-XB)	15-97-8023	15-97-8043	—	—	—	—	—	—
Terminal Position Assurance 30072								
	15-97-9041	15-97-9041	15-97-9061	15-97-9081	15-97-9101	15-97-9121	—	15-97-9161
Connector Position Assurance 30071 Fits All Receptacles								
All Ckt. Sizes	15-97-0071	15-97-0071	15-97-0071	15-97-0071	15-97-0071	15-97-0071	—	15-97-0071

† Per circuit, based on fully loaded housings with 30°C temperature rise.

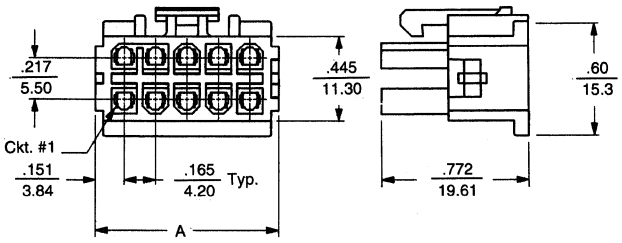
* Receptacles have side pull tabs for use with strain reliefs.

K

Mini-Fit, TPA Series

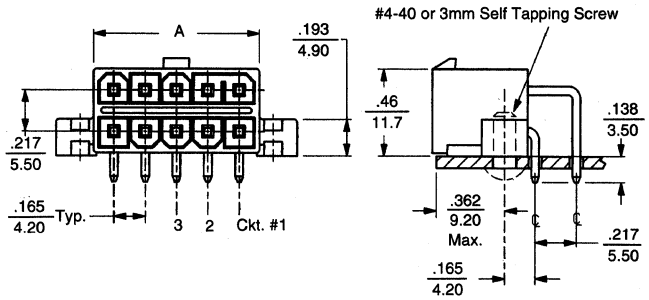
30067-* Receptacle Housing

Uses 5556 Terminal



30070-* Right Angle Header with Flange

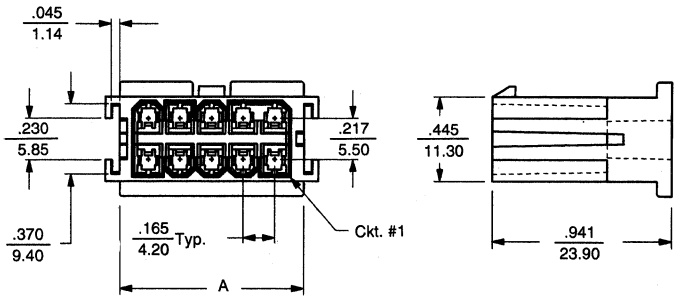
Peg Mounted Version Available



30068-* Plug Housing

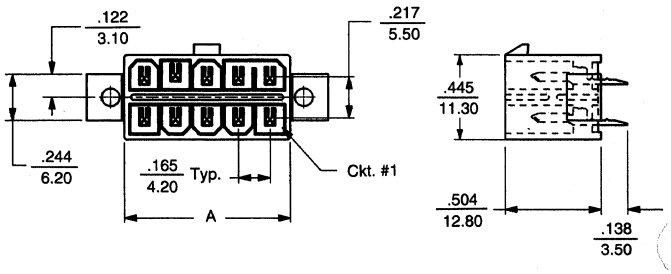
Free Hanging

Uses 5558 Terminal

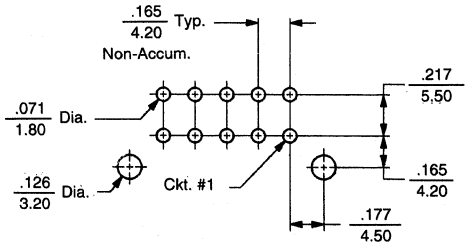


30069-* Vertical Header Assembly

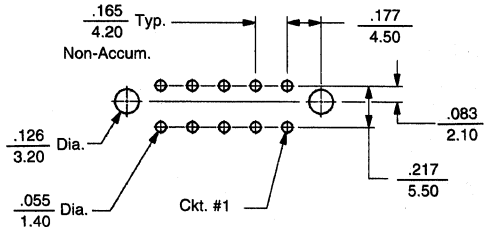
Peg Mounted Version Available



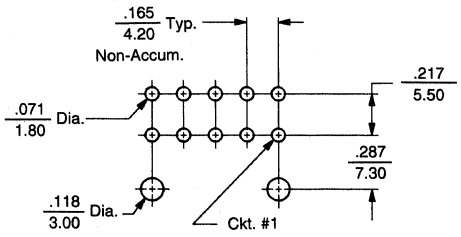
PCB Layouts



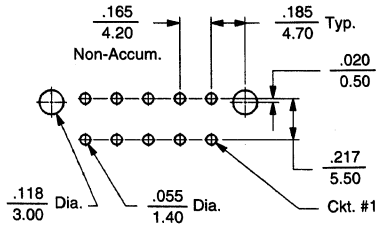
For 30070
Right Angle Header w/Flanges
Recommended P.C. Board Layout



For 30069
Vertical Header w/Flanges
Recommended P.C. Board Layout

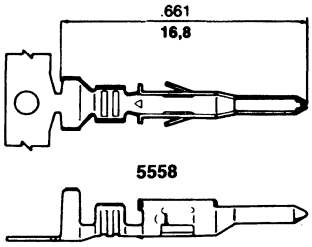


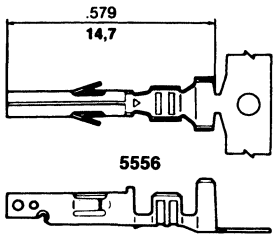
For 30070
Right Angle w/Pegs
Recommended P.C. Board Layout



For 30069
Vertical Header w/Pegs
Recommended P.C. Board Layout

Mini-Fit Series 5556/5558 Terminals





Use with housings:

5559
42475
30068

Use with housings:

5557
42474
30067

NOTE: Terminals require proper orientation in housings and are not interchangeable in the housings.

Ordering Information

Wire Size (AWG)	Insulation Range	Chain		Loose		Application Tooling			
		Male (5558)	Female (5556)	Male (5558)	Female (5556)	Handtool	TM-42 Die	Mini-Mac Die	Extract. Tool
Brass (Tin Plated)									
16	.071"-.122" **1,8-3,1**	•39-00-0081	•39-00-0077	•39-00-0082	•39-00-0078	•11-01-0145	11-40-2187	11-18-2069	•11-03-0038
18-24	.051"-.122" **1,3-3,1**	•39-00-0040	•39-00-0038	•39-00-0041	•39-00-0039	•11-01-0122	11-40-2119	11-18-2002	•11-03-0038
22-28	.035"-.071" **0,9-1,8**	•39-00-0048	•39-00-0046	•39-00-0049	•39-00-0047	•11-01-0125	11-40-2137	11-18-2003	•11-03-0038
Brass (Gold Plated 30 Microinch Pre-Plate)									
16	.071"-.122" **1,8-3,1**	N/A	•39-00-0089	N/A	•39-00-0090	•11-01-0145	11-40-2187	11-18-2069	•11-03-0038
18-24	.051"-.122" **1,3-3,1**	N/A	•39-00-0055	N/A	•39-00-0056	•11-01-0122	11-40-2119	11-18-2002	•11-03-0038
22-28	.035"-.071" **0,9-1,8**	N/A	•39-00-0085	N/A	•39-00-0086	•11-01-0125	11-40-2137	11-18-2003	•11-03-0038
Brass (Post Plated Tin Over Nickel)									
16	.071"-.122" **1,8-3,1**	•39-00-0124	•39-00-0211	•39-00-0125	•39-00-0212	•11-01-0145	11-40-2187	11-18-2069	•11-03-0038
18-24	.051"-.122" **1,3-3,1**	•39-00-0120	•39-00-0207	•39-00-0121	•39-00-0208	•11-01-0122	11-40-2119	11-18-2002	•11-03-0038
22-28	.035"-.071" **0,9-1,8**	•39-00-0122	•39-00-0209	•39-00-0123	•39-00-0210	•11-01-0125	11-40-2137	11-18-2003	•11-03-0038
Brass (Post Plated 30 Microinch Gold)									
16	.071"-.122" **1,8-3,1**	•39-00-0095	•39-00-0167	•39-00-0096	•39-00-0168	•11-01-0145	11-40-2187	11-18-2069	•11-03-0038
18-24	.051"-.122" **1,3-3,1**	•39-00-0053	•39-00-0163	•39-00-0054	•39-00-0164	•11-01-0122	11-40-2119	11-18-2002	•11-03-0038
22-28	.035"-.071" **0,9-1,8**	•39-00-0087	•39-00-0165	•39-00-0088	•39-00-0166	•11-01-0125	11-40-2137	11-18-2003	•11-03-0038
Phosphor Bronze (Tin Plated)									
16	.071"-.122" **1,8-3,1**	•39-00-0083	•39-00-0079	•39-00-0084	•39-00-0080	•11-01-0145	11-40-2187	11-18-2069	•11-03-0038
18-24	.051"-.122" **1,3-3,1**	•39-00-0061	•39-00-0059	•39-00-0062	•39-00-0060	•11-01-0122	11-40-2119	11-18-2002	•11-03-0038
22-28	.035"-.071" **0,9-1,8**	•39-00-0067	•39-00-0065	•39-00-0068	•39-00-0066	•11-01-0125	11-40-2137	11-18-2003	•11-03-0038
Phosphor Bronze (Gold Plated 30 Microinch Pre-Plate)									
16	.071"-.122" **1,8-3,1**	N/A	•39-00-0157	N/A	•39-00-0158	•11-01-0145	11-40-2187	11-18-2069	•11-03-0038
18-24	.051"-.122" **1,3-3,1**	N/A	•39-00-0153	N/A	•39-00-0154	•11-01-0122	11-40-2119	11-18-2002	•11-03-0038
22-28	.035"-.071" **0,9-1,8**	N/A	•39-00-0155	N/A	•39-00-0156	•11-01-0125	11-40-2137	11-18-2003	•11-03-0038
Phosphor Bronze (Post Plated Tin Over Nickel)									
16	.071"-.122" **1,8-3,1**	•39-00-0130	•39-00-0217	•39-00-0131	•39-00-0218	•11-01-0145	11-40-2187	11-18-2069	•11-03-0038
18-24	.051"-.122" **1,3-3,1**	•39-00-0126	•39-00-0213	•39-00-0127	•39-00-0214	•11-01-0122	11-40-2119	11-18-2002	•11-03-0038
22-28	.035"-.071" **0,9-1,8**	•39-00-0128	•39-00-0215	•39-00-0129	•39-00-0216	•11-01-0125	11-40-2137	11-18-2003	•11-03-0038
Phosphor Bronze (Post Plated 30 Microinch Gold)									
16	.071"-.122" **1,8-3,1**	•39-00-0223	•39-00-0185	•39-00-0224	•39-00-0186	•11-01-0145	11-40-2187	11-18-2069	•11-03-0038
18-24	.051"-.122" **1,3-3,1**	•39-00-0219	•39-00-0181	•39-00-0220	•39-00-0182	•11-01-0122	11-40-2119	11-18-2002	•11-03-0038
22-28	.035"-.071" **0,9-1,8**	•39-00-0221	•39-00-0183	•39-00-0222	•39-00-0184	•11-01-0125	11-40-2137	11-18-2003	•11-03-0038

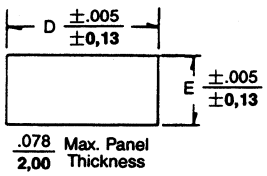
• U.S. Standard Product, available through Molex franchised distributors.

K

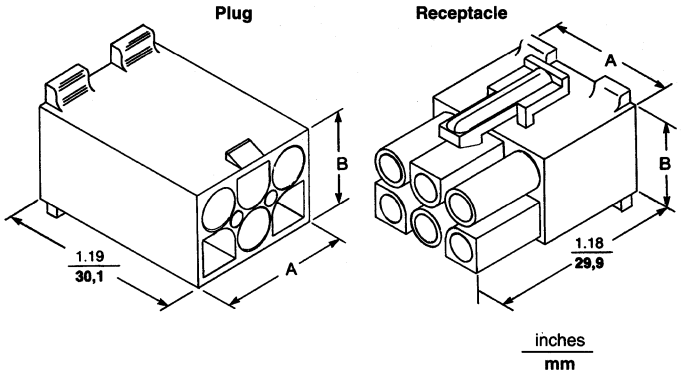
.093" 2,36mm Power Connector

3191 Series

- ☐ Up to 12 amperes per circuit*
- ☐ 600 volt rating*
- ☐ Positive lock
- ☐ Fully isolated terminals
- ☐ Mates with 5219 vertical header
- ☐ U.L. File No. E-29179
  CSA File No. LR 19980
  TUV License No. R-75107

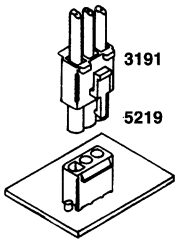


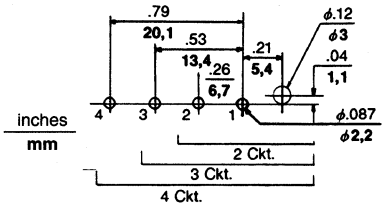
Mounting Hole Detail

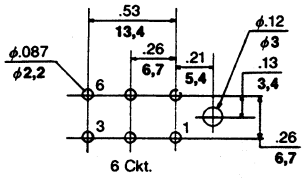


5219 Series

.093" (2,36mm) Header for 3191 Wire-to-Board Applications







P.C. Board Hole Dimensions
Layout provides press fit

Ordering Information (Order Terminals on Pages 22-23K)

Ckt. I.D. Shown is Mating Side of Receptacle; Wire Side of Plug								
Circuit Size	**3191-1**	**3191-2**	**3191-3**	**3191-4**	**3191-6**	**3191-9**	**3191-12**	**3191-15**
Amperes/Circuit (Max)*	12	12	11	9	9	9	9	9
Voltage Rating (Max)*	600	600	600	600	600	600	600	600
Receptacle Order No.								
94V-2	•19-09-1019	•19-09-1029	•19-09-1039	•19-09-1049	•19-09-1069	•19-09-1099	•19-09-1129	•19-09-1159
94V-0	•19-09-1016	•19-09-1026	•19-09-1036	•19-09-1046	•19-09-1066	•19-09-1096	•19-09-1126	•19-09-1156
Dimension A	.30 **7,6**	.56 **14,3**	.83 **21,0**	1.09 **27,7**	.83 **21,0**	.83 **21,0**	1.09 **27,7**	1.35 **34,4**
Dimension B	.30 **7,6**	.30 **7,6**	.30 **7,6**	.30 **7,6**	.56 **14,3**	.83 **21,0**	.83 **21,0**	.83 **21,0**
Plug Order No.								
Panel Mount 94V-2	•19-09-2018	•19-09-2028	•19-09-2038	•19-09-2048	•19-09-2068	•19-09-2098	•19-09-2128	•19-09-2158
94V-0	•19-09-2017	•19-09-2027	•19-09-2037	•19-09-2047	•19-09-2067	•19-09-2097	•19-09-2127	•19-09-2157
Free Hanging 94V-2	•19-09-2019	•19-09-2029	•19-09-2039	•19-09-2049	•19-09-2069	•19-09-2099	•19-09-2129	•19-09-2159
94V-0	•19-09-2016	•19-09-2026	•19-09-2036	•19-09-2046	•19-09-2066	•19-09-2096	•19-09-2126	•19-09-2156
Dimension A	.32 **8,1**	.59 **14,9**	.85 **21,59**	1.11 **28,3**	.85 **21,6**	.85 **21,6**	1.11 **28,2**	1.38 **35,1**
Dimension B	—	.32 **8,1**	.32 **8,2**	.32 **8,2**	.59 **14,9**	.85 **21,6**	.87 **22,1**	.87 **22,1**
Panel D	.484 **12,3**	.80 **20,32**	1.020 **25,9**	1.270 **32,26**	1.047 **26,6**	1.048 **26,62**	1.300 **33,02**	1.552 **39,42**
Cutout E	.394 **10,0**	.365 **9,27**	.394 **10,0**	.394 **10,0**	.681 **17,3**	.909 **23,09**	.910 **23,10**	.910 **23,11**
Header Order No. (5219 Series)								
Vertical	N/A	15-31-1026	15-31-1036	15-31-1046	15-31-1066	—	—	—

NOTES: *Rating based on fully loaded housings
• U.S. Standard Product, available through Molex franchised distributors.

Polarizing Key Ordering Information

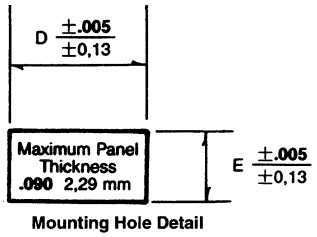
Eng. No.	Order No.
3191-K	19-09-1101 (use in plug only)

K

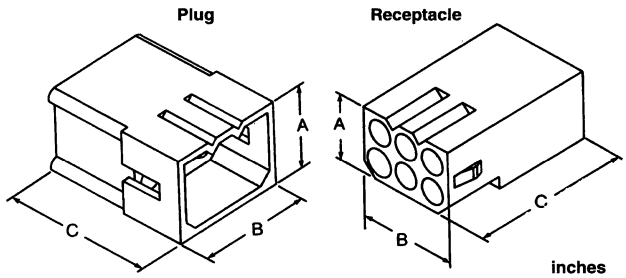
.093" 2,36mm Power Connector

Standard

- U.L. File No. E-29179
  CSA File No. LR19980
- Up to 12 amperes per circuit
- 250 rating
- Passive (friction) lock
- 1 to 15 circuit housings
- Panel and PCB mountable
- One piece strain reliefs available (42148 Series)
- Mating headers available (see notes 2, 3 & 4)



Mounting Hole Detail



inches / mm

Ordering Information

Ckt. I.D. Shown is Mating Side of Receptacle; Wire Side of Plug											
Series-Circuit Size	**1951-1**	**1619-1**	**1545-2**	**1396-3**	**1490-4**	**2163-4**	**1653-5**	**1261-6**	**1292-9**	**1360-12**	**1375-15**
Amperes/Circuit (Max)[5]	**12**	**12**	**12**	**12**	**9**	**9**	**9**	**9**	**9**	**7.5**	**7.5**
Voltage Rating (Max)[5]	**250***	**250**	**250**	**250**	**250**	**250**	**250**	**250**	**250**	**250**	**250**
Vertical Headers	N/A	N/A	See Note 1, 4	See Note 1, 2, 3 & 4	See Note 2 & 4	See Note 4	See Note 3 & 4	See Note 2, 3 & 4	See Note 2, 3 & 4	See Note 2, 3 & 4	See Note 2 & 4
Receptacle Order No.											
Panel Mount	N/A	N/A	•03-09-1027	•03-09-1031	•03-09-1041	•03-09-1040	N/A	•03-09-1061	•03-09-1091	•03-09-1125	•03-09-1154
Free Hanging	•03-09-1014	•03-09-1011	•03-09-1022	•03-09-1032	•03-09-1042	•03-09-1049	•03-09-1052	•03-09-1064	•03-09-1094	•03-09-1126	•03-09-1157
Dimension A	—	—	**.54** 13,6	**.67** 17,0	**.87** 22,1	**.43** 11,0	**1.07** 27,2	**.43** 11,0	**.670** 17,0	**.87** 22,1	**1.07** 27,1
B	**.31** 7,9	**.23** 5,8	**.25** 6,4	**.24** 6,1	**.24** 6,0	**.43** 11,0	**.24** 6,2	**.63** 16,0	**.63** 16,0	**.63** 16,0	**.63** 16,0
C	**1.86** 47,1	**1.03** 26,2	**1.03** 26,2	**1.01** 25,7	**1.03** 26,2	**1.03** 26,2	**1.00** 25,4	**1.02** 25,9	**1.03** 26,2	**1.02** 25,9	**1.02** 25,9
Panel D	—	—	**.725** 18,42	**.830** 21,1	**1.038** 26,37	**.500** 12,70	—	**.678** 17,22	**.828** 21,03	**1.05** 26,67	**1.240** 31,50
Cutout E	—	—	**.312** 7,92	**.312** 7,92	**.312** 7,92	**.600** 15,24	—	**.600** 15,24	**.725** 18,42	**.725** 18,42	**.725** 18,42
Plug Order No.											
Panel Mount	N/A	N/A	•03-09-2021	•03-09-2031	•03-09-2041	•03-09-2040	N/A	•03-09-2061	•03-09-2091	•03-09-2122	•03-09-2152+
Free Hanging	•03-09-2014	•03-09-2011	•03-09-2022	•03-09-2032	•03-09-2042	•03-09-2049	•03-09-2052	•03-09-2062	•03-09-2092	•03-09-2121	•03-09-2154
Dimension A	—	—	**.64** 16,3	**.77** 19,6	**.97** 24,7	**.54** 13,7	**1.18** 30,0	**.54** 13,7	**.77** 19,6	**.98** 24,9	**1.17** 29,7
B	**.44** 11,2	**.36** 9,1	**.35** 8,9	**.34** 8,6	**.34** 8,6	**.54** 13,7	**.34** 8,6	**.73** 18,6	**.73** 18,5	**.74** 18,8	**.74** 18,8
C	**2.25** 57,2	**1.00** 25,4	**1.00** 25,4	**1.00** 25,4	**1.00** 25,4	**1.02** 26,0	**1.00** 25,4	**1.00** 25,4	**1.00** 25,4	**.98** 24,9	**.98** 24,9
Panel D	—	—	**.80** 20,32	**.933** 23,70	**1.131** 28,73	**.555** 14,10	—	**.750** 19,05	**.937** 23,80	**1.155** 29,34	**1.343** 34,11
Cutout E	—	—	**.375** 9,53	**.375** 9,53	**.375** 9,53	**.695** 17,65	—	**.695** 17,65	**.660** 16,76	**.760** 19,30	**.760** 19,30

NOTES: [1]Positive lock configuration available
[2]Vertical header (shrouded) available, see 3099 Series
[3]Vertical header (unshrouded) available, see 1840 Series
[4] Vertical headers may be assembled using PC tail terminals in standard housings
[5]Rating based on fully loaded housings
*Tested to 5,000 volts with no dielectric breakdown
+Part does not have lock windows. Consult Molex sales drawing.

42148 Series
Strain Relief

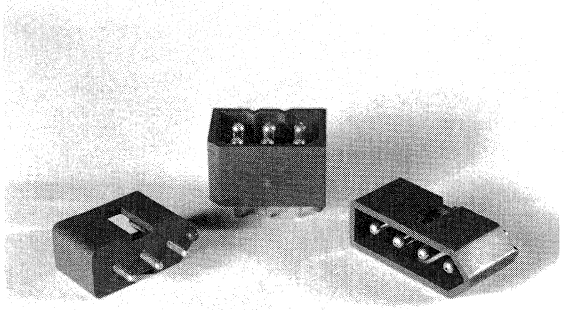
Ordering Information

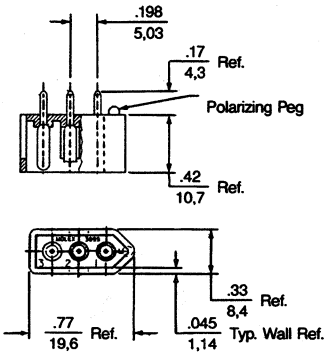
Ckt. Size	Strain Relief		Used With	
	Part Number	Order Number	Plug Order Number	Receptacle Order No.
2	42148-2AA	15-04-0222	03-09-2027	03-09-1021
4	42148-4LA	15-04-0223	03-09-2041	03-09-1041
15	42148-15AA	15-04-0389	03-09-2152	03-09-1151

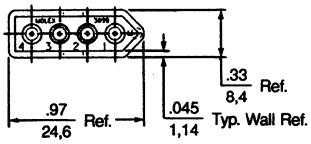
.093" 2,36mm Shrouded Pin and Socket Wafers

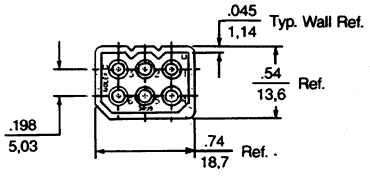
3099 Series

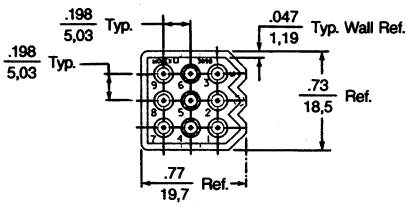
- Preassembled
- Available in 3, 4, 6, 9, 12 and 15 circuits
- Intermix of male and female terminals for polarization
- UL rated 94V-0 polyester
- Mates with standard .093" 2,36mm diameter receptacles
- Plating: electro-tin, gold available contact factory
- May be used with 1840 Header as a board-to-board connector



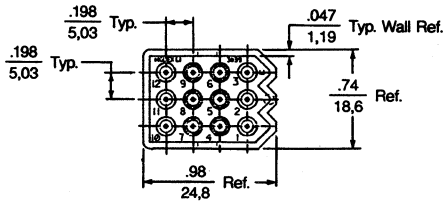




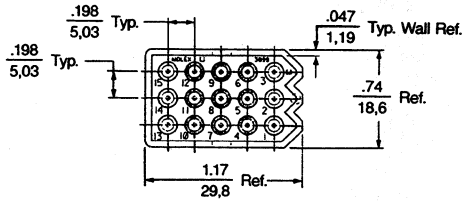




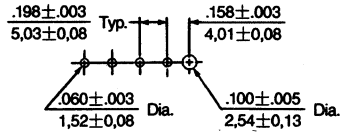
Recommended PCB Layout



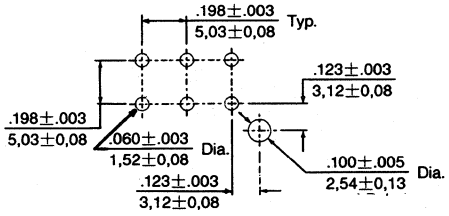
Recommended PCB Layout



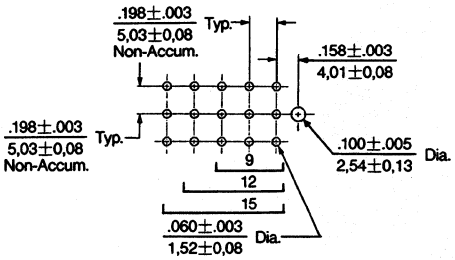
Recommended PCB Layout



3 and 4 Circuit



6 Circuit



9, 12 and 15 Circuit

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Ordering Information 3099

Eng. No.	Order No.	Terminal Pattern 1	2	3	4	5	6	Eng. No.	Order No.	Terminal Pattern 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
AE-3099P-3-1	10-18-1032	M	M	M	—	—	—	3099-9A1	•50-29-1409	B	B	B	B	B	B	B	B	B	—	—	—	—	—	—
E-3099-P-3	•50-29-1031	B	B	B	—	—	—	A-3099-9	10-18-1090	M	M	M	M	M	M	M	M	M	—	—	—	—	—	—
AE-3099P-4	10-18-1041	M	M	M	M	—	—	3099-12A1	•50-29-1412	B	B	B	B	B	B	B	B	B	B	B	—	—	—	—
E3099-P-4	•50-29-1041	B	B	B	B	—	—	A-3099-12	10-18-1120	M	M	M	M	M	M	M	M	M	M	M	—	—	—	—
AE-3099P-6A	10-18-1061	M	M	M	M	M	M	3099-15A1	•50-29-1415	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
E-3099P-6	•50-29-1061	B	B	B	B	B	B	A-3099-15	10-18-1150	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M

M = Male B = Blank
— = No Circuit Available

•U.S. Standard Product, available through Molex franchised distributors.
For terminals alone, see 1840 Series

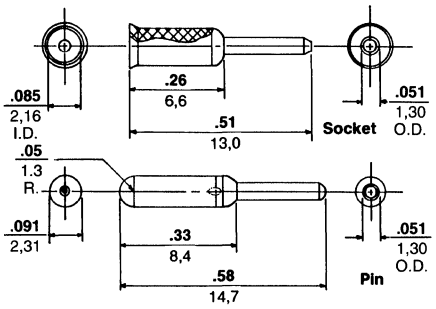
Assembly Tooling Ordering Information

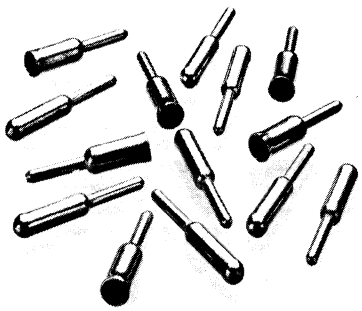
Eng. No.	Order No.
AM63106-1	11-20-1172

Rated Voltage, Current - Maximum: 250V ac, 5 amps per circuit. Current rating varies somewhat in the particular variations.

.093" 2,36mm Pin and Socket Wafers and Terminals

1840 Series
Used with 1840 and 3099 Series Housings Discrete Terminals



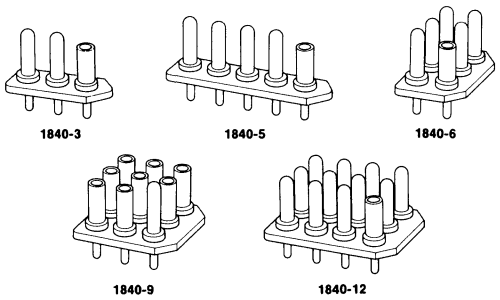


Ordering Information

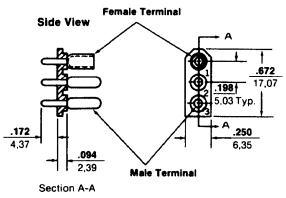
Engineering No.	Type	Tin Plating Order No.	Gold Plating Order No.
1840-A1B	Socket (Female)	•16-06-0001	Consult Factory
1840-A2B	Pin (Male)	•16-06-0002	Consult Factory

Wafercon® Base & Terminal Assemblies

- 3, 5, 6, 9 & 12 circuits available
- Mates with Molex standard .093" 2,36mm diameter standard receptacles
- Wafers pre-assembled with male, female or voids in any pattern
- Tin or gold plated terminals
- Available in shrouded (in some circuit sizes) version for additional stability

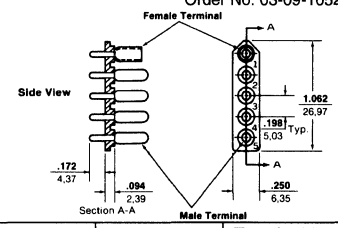


1840-3
Mates with 1396R1 Receptacle
Order No. 03-09-1032



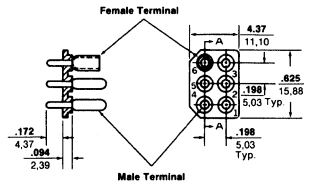
Eng. No.	Order No.	Terminal Pattern 1	2	3
A-1840-3-2	•09-18-5031	F	M	M
1840-03A1A1	•03-04-4031	B	B	B

1840-5
Mates with 1653-R1 Receptacle
Order No. 03-09-1052



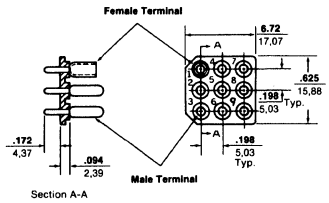
Eng. No.	Order No.	Terminal Pattern 1	2	3	4	5
A-1840-5-0	•09-18-5051	F	M	M	M	M
1840-05A1A1	•03-04-4051	B	B	B	B	B

1840-6
Mates with 1261R2 Receptacle
Order No. 03-09-1063



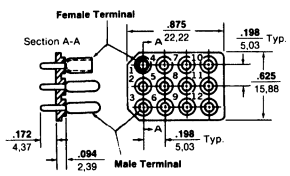
Eng. No.	Order No.	Terminal Pattern 1	2	3	4	5	6
A-1840-6-4	•09-18-5061	M	M	M	M	M	F
A-1840-6-10	•09-18-5069	F	M	M	M	M	M
1840-06A1A1	•03-04-4061	B	B	B	B	B	B

1840-9
Mates with 1292R2 Receptacle
Order No. 03-09-1093



Eng. No.	Order No.	Terminal Pattern 1	2	3	4	5	6	7	8	9
A-1840-9-2	•09-18-5091	M	M	F	M	M	M	M	M	M
A-1840-9-12	•09-18-5094	F	M	M	M	M	M	M	M	M
1840-09A2A1	•03-04-4091	B	B	B	B	B	B	B	B	B

1840-12
Mates with 1360R1 Receptacle
Order No. 03-09-1122



Eng. No.	Order No.	Terminal Pattern 1	2	3	4	5	6	7	8	9	10	11	12
A-1840-12-2	•09-18-5121	F	M	M	M	M	M	M	M	M	M	M	M
1840-12A2A1	•03-04-4121	B	B	B	B	B	B	B	B	B	B	B	B

1840 Technical Data:
Electrical Characteristics:

Contact Resistance - 3 MV @ 1 amp

Temperature Range - -40°F to 221°F (-40°C to 105°C)

Rated Voltage, Current - Maximum: 250V ac, 5 amps per circuit. Current rating varies somewhat in the particular variations.

M = Male terminal
F = Female terminal
B = No terminal

Polarization accomplished through intermix of male and female terminals
•U.S. Standard Product, available through Molex franchised distributors.
For other configurations, contact factory.

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.093" 2,36mm Diameter Terminals

Specifications:

Electrical:

Resistance: MV voltage drop per amp, ±10%: • 1st engagement 3.0 • 10th engagement 3.1

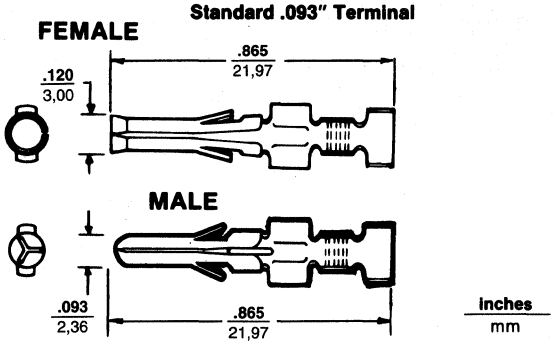
High Voltage Test: Withstands 1500 volts RMS for 60 seconds min. applied between adjacent terminals.

Temperature Rise: 30°C maximum for all connectors at maximum rated current.

Current Rating: Amperage rating up to 12 amps on some sizes.

Storage Temperature Range: -40°C to 125°C

Standard .093" Terminal



Mechanical:

Terminal Crimp Strength: Minimum pull-out force in pounds (kilograms) for AWG wire sizes:

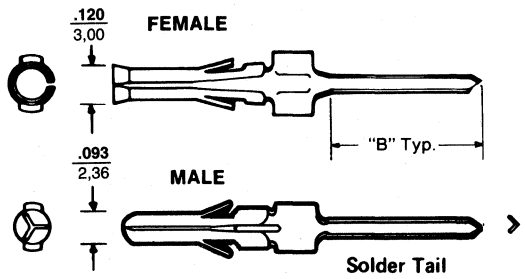
14—35 (15,9)	24—8 (3,63)
16—30 (13,6)	26—5 (2,27)
18—20 (9,07)	28—3 (1,36)
20—15 (6,80)	30—2 (0,91)
22—10 (4,54)	

Engage/Disengage Forces: Standard terminal of .010" 0,25mm stock 70/30 brass. Average engage/disengage forces in plug/receptacle connector with +30% tolerance in pounds (kilograms) by circuit:

1-circuit	3.5/ 2.75 (1,59/1,25)	5-circuit	17.5/13.7 (7,95/ 6,24)
2-circuit	7.0/ 5.5 (3,18/2,50)	6-circuit	21.0/16.5 (9,53/ 7,50)
3-circuit	9.5/ 8.26 (4,77/3,75)	9-circuit	31.5/24.8 (14,30/11,24)
4-circuit	14.0/11.02 (6,36/5,00)	12-circuit	42.0/33.07 (19,06/15,00)
		15-circuit	52.5/41.3 (23,84/18,73)

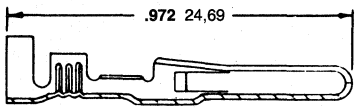
Special Purpose .093" Diameter Terminals

P.C. Tail



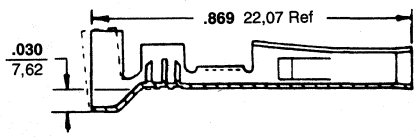
Grounding Pin "Make first-Break last"

1973 Series

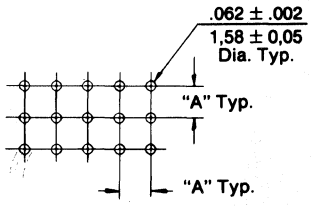


High Current/Low Force

42477 Series



Typical PCB Hole Layout



Housing	Dim. A	Dim. B* P.C. Tails 1376/1377	Dim. B* P.C. Tails 2605/2606
.093	.198 5,03	.145 3,68	.285 7,24
3191	.264 6,71	N/A	.210 5,33

* Useable tail length when inserted into housing.

.093" 2,36mm Diameter Terminals

Ordering Information

inches
mm

Crimp Wire Size	Insulation Diameter	Male/Female Series	Chain Form (a) Order Numbers		Loose Form Order Numbers		Application Tooling Order Numbers			
			Male	Female	Male	Female	Hand Tool	TM-42 Die*	Mini Mac Die*	Extraction Tool
Standard Brass .010"										
Tin Plated										
14-20	**.065/.160** 1,65/4,06	1190/1189	•02-09-2101	•02-09-1102	•02-09-2103	•02-09-1104	11-01-0084	11-40-2001	11-18-2143	11-03-0006
18-22	**.060/.120** 1,52/3,05	1380/1381	•02-09-2116	•02-09-1117	•02-09-2118	•02-09-1119	11-01-0084	11-40-2002	11-18-2158 11-18-2007	11-03-0006
22-24	**.050/.070** 1,27/1,78	2870/2871	02-09-2136	02-09-1138	02-09-2137	02-09-1139	11-01-0097	11-40-2020	11-18-2102	11-03-0006
24-30	**.030/.060** ,076/1,52	1434/1433	•02-09-2141	•02-09-1142	•02-09-2143	•02-09-1144	11-01-0006	11-40-2003	11-18-2008	11-03-0006
Select Gold (.000015" min.)										
14-20	**.065/.160** 1,65/4,06	1190/1189	•02-09-6100	•02-09-5100	•02-09-6106	•02-09-5106	11-01-0084	11-40-2001	11-18-2143	11-03-0006
18-22	**.060/.120** 1,52/3,05	1380/1381	•02-09-6122	•02-09-5143	•02-09-6123	•02-09-5142	11-01-0084	11-40-2002	11-18-2158 11-18-2007	11-03-0006
24-30	**.030/.060** ,076/1,52	1434/1433	•02-09-6144	•02-09-5146	•02-09-6145	•02-09-5147	11-01-0006	11-40-2003	11-18-2008	11-03-0006
Select Gold (.000050" min.)										
14-20	**.065/.160** 1,65/4,06	1190/1189	•02-09-6101	•02-09-5102	•02-09-6110	•02-09-5111	11-01-0084	11-40-2001	11-18-2143	11-03-0006
18-22	**.060/.120** 1,52/3,05	1380/1381	•02-09-6125	•02-09-5130	•02-09-6126	•02-09-5133	11-01-0084	11-40-2002	11-18-2158 11-18-2007	11-03-0006
Low Engagement Force (b)										
Brass .008" Tin Plated										
18-22	**.060/.120** 1,52/3,05	4272/2273	02-09-1151	02-09-1122	02-09-1149	02-09-1123	11-01-0084	11-40-2002	11-18-2158	11-03-0006
Grounding Pin "Make First - Break Last"										
14-18	**.065/.140** 1,65/3,56	1973-2	02-09-8108	—	02-09-8109	—	11-01-0084	11-40-2214	11-18-2011	11-03-0017
18-22	**.060/.120** 1,52/3,05	1973	02-09-8103	—	02-09-8104	—	11-01-0084	11-40-2214	11-18-2011	11-03-0017
High Current/Low Engagement Force "End Carried" (a)										
14-18	**.140** max. 3,56	42478/42477	•02-09-2611	•02-09-1615	•02-09-2612	•02-09-1616	11-01-0179	11-40-2234	11-18-2134	11-03-0006
P.C. Tail										
For Std. .093 Housing Only (Tin) Not for use with 3191 Series										
		1376/1377	—	—	•02-09-2134	•02-09-1134	N/A	N/A	N/A	N/A
For Std. .093 Housing Only (Select Gold .000030 min.) Not for use with 3191 Series										
		1376/1377	—	—	•02-09-6132	•02-09-5132	N/A	N/A	N/A	N/A
For 3191 Housing (Tin) - May also be used in Std. .093 Housing										
		2606/2605	—	—	•02-09-8113	•02-09-1145	N/A	N/A	N/A	N/A
Phos-Bronze .010"										
Tin Plated										
14-20	**.065/.160** 1,65/4,06	/4550	—	02-09-1205	—	02-09-1206	11-01-0084	11-40-2001	11-18-2143	11-03-0006
18-22	**.060/.120** 1,52/3,05	/2151	—	02-09-1203	—	02-09-1204	11-01-0084	11-40-2002	11-18-2158	11-03-0006
Select Gold (.000030 min.)										
14-20	**.065/.160** 1,65/4,06	/4550	—	02-09-5169	—	02-09-5170	11-01-0084	11-40-2001	11-18-2143	11-03-0006
Phos-Bronze .008"										
Tin Plated										
14-20	**.065/.160** 1,65/4,06	/6310	—	02-09-1209	—	02-09-1211	11-01-0084	11-40-2001	11-18-2143	11-03-0006
18-22	**.060/.120** 1,52/3,05	/6271	—	02-09-1208	—	02-09-1212	11-01-0084	N/A	N/A	11-03-0006

•U.S. Standard product, available through Molex franchised distributors.

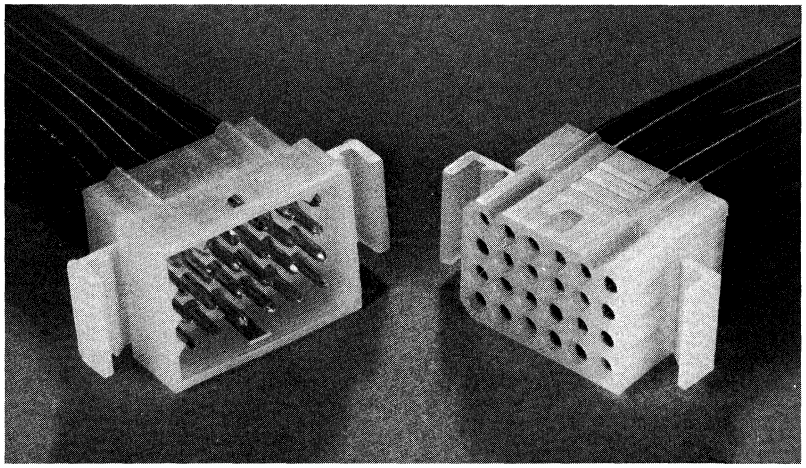
(a) Not recommended for use with standard .093 housing when using 14 AWG wire.
(b) Engagement force is approximately 2.5 lbs. per circuit. Current rating is de-rated from standard terminals by 2 amperes per circuit.
*Die only, **does not include** press or spare tooling.

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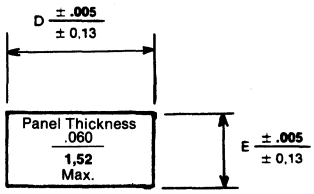
.062" 1,57mm Power Connector

Standard .062"

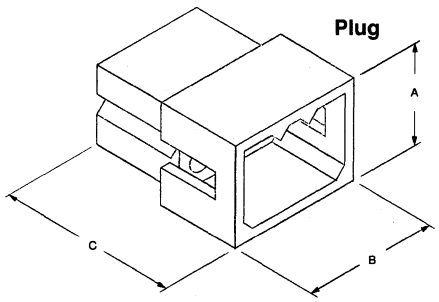
- UL File No. E-29179
  CSA File No. LR-19980
- Up to 5 amperes per circuit*
- 250 volt rating*
- Friction lock
- Panel and PCB mountable
- One piece strain relief available.
  41316 Series

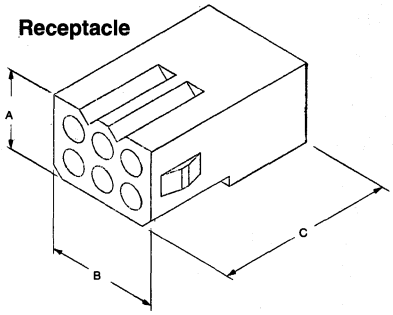


Plug Receptacle



Mounting Hole Detail





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Ordering Information (Additional sizes on next page)

inches / mm

Ckt. I.D. Shown is Mating Side of Receptacle; Wire Side of Plug	◎	① ②	① ○ ③	① ○ ○ ④	② ④ / ① ③	① ○ ○ ○ ⑤	③ ⑥ / ○ ○ / ① ④
Series-Circuit Size	**1625-1**	**1625-2**	**1625-3**	**1625-4**	**2004-4**	**1625-5**	**1625-6**
Amperes/Circuit (Max)*	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Voltage Rating (Max)*	**250**	**250**	**250**	**250**	**250**	**250**	**250**
Receptacle							
Panel Mount	N/A	•03-06-1022	•03-06-1031	•03-06-1041	•03-06-1043	•03-06-1055	•03-06-1061
Free Hanging	•03-06-1011	•03-06-1023	•03-06-1032	•03-06-1042	•03-06-1044	•03-06-1056	•03-06-1062
Dimension A	**.19** 4,9	**.34** 8,6	**.48** 12,3	**.63** 16,0	**.34** 8,6	**.78** 19,7	**.34** 8,7
B	N/A	**.19** 4,9	**.19** 4,9	**.19** 4,9	**.34** 8,6	**.19** 4,9	**.49** 12,5
C	**.78** 19,8	**.81** 20,6	**.78** 19,8	**.780** 19,8	**.77** 19,6	**.78** 19,8	**.78** 19,8
Panel D	N/A	**.505** 12,83	**.650** 16,51	**.785** 19,94	**.506** 12,85	**.940** 23,88	**.552** 14,02
Cutout E	N/A	**.265** 6,73	**.265** 6,73	**.260** 6,60	**.400** 10,16	**.265** 6,73	**.505** 12,83
Plug							
Panel Mount	N/A	•03-06-2024	•03-06-2033	•03-06-2041	•03-06-2043	•03-06-2054	•03-06-2062
Free Hanging	•03-06-2011	•03-06-2023	•03-06-2032	•03-06-2042	•03-06-2044	•03-06-2055	•03-06-2061
Dimension A	**.30** 7,6	**.44** 11,2	**.59** 15,0	**.73** 18,5	**.44** 11,2	**.89** 22,6	**.45** 11,4
B	N/A	**.30** 7,6	**.30** 7,6	**.29** 7,5	**.44** 11,2	**.31** 7,9	**.60** 15,2
C	**.75** 19,1	**.78** 19,8	**.75** 19,1	**.75** 19,1	**.77** 19,6	**.75** 19,1	**.75** 19,1
Panel D	N/A	**.609** 15,47	**.754** 19,15	**.865** 21,97	**.615** 15,62	**1.044** 26,52	**.615** 15,62
Cutout E	N/A	**.318** 8,08	**.318** 8,08	**.312** 7,93	**.465** 11,80	**.318** 8,08	**.607** 15,42

Notes: *Rating based on fully loaded housings
(Order terminals on Page 26K of this catalog)

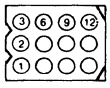
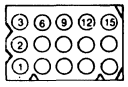
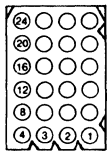
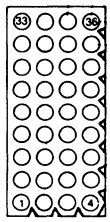
•U.S. Standard Product, available through Molex franchised distributors

.062" 1,57mm Power Connector

Standard .062"

inches
mm

Ordering Information (Additional sizes on previous page)

Ckt. I.D. Shown is Mating Side of Receptacle; Wire Side of Plug					
Series-Circuit Size	**1625-9**	**1625-12**	**1625-15**	**1625-24**	**1772-36**
Amperes/Circuit (Max)*	**5**	**5**	**5**	**5**	**5**
Voltage Rating (Max)*	**250**	**250**	**250**	**250**	**250**
Receptacle					
Panel Mount	•03-06-1091	•03-06-1121	•03-06-1151	•03-06-1241	•03-06-1361
Free Hanging	•03-06-1092	•03-06-1122	•03-06-1152	N/A	•03-06-1362
Dimension A	**.49** 12,4	**.63** 16,1	**.77** 19,5	**.92** 23,3	**1.51** 38,2
B	**.49** 12,4	**.49** 12,5	**.49** 12,4	**.63** 16,1	**.69** 17,5
C	**.780** 19,8	**.78** 19,8	**.78** 19,8	**.75** 19,1	**.78** 19,8
Panel D	**.650** 16,51	**.795** 20,19	**.930** 23,62	**1.079** 27,41	**1.677** 42,60
Cutout E	**.552** 14,02	**.563** 14,30	**.569** 14,45	**.715** 18,16	**.707** 17,96
Plug					
Panel Mount	•03-06-2091	•03-06-2121	•03-06-2151	•03-06-2241	•03-06-2361
Free Hanging	•03-06-2092	•03-06-2122	•03-06-2152	•03-06-2242	•03-06-2362
Dimension A	**.59** 15,0	**.74** 18,8	**.87** 22,1	**1.02** 25,9	**1.62** 41,2
B	**.59** 15,0	**.59** 15,0	**.59** 15,0	**.74** 18,8	**.80** 20,3
C	**.75** 19,0	**.75** 19,1	**.75** 19,0	**.75** 19,1	**.75** 19,1
Panel D	**.752** 19,10	**.903** 22,94	**1.032** 26,21	**1.182** 30,02	**1.795** 45,59
Cutout E	**.615** 15,62	**.614** 15,60	**.620** 15,75	**.765** 19,43	**.825** 20,96

Notes: *Rating based on fully loaded housings
(Order terminals on Page 26K of this catalog)

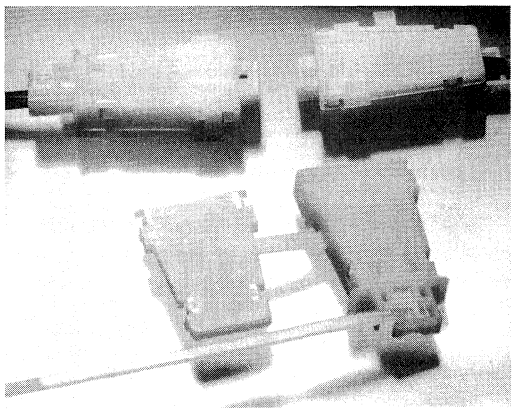
•U.S. Standard Product, available through Molex franchised distributors

K

41316 Strain Relief Ordering Information

For use with 1625 Series connectors only, **with mounting ears**

Ckt. Size	Strain Relief Order No.	Uses Plugs Order No.	Uses Receptacles Order No.
3	15-04-0323	03-06-2033	03-06-1031
9	15-04-0327	03-06-2091	03-06-1091 or 03-06-1094
15	15-04-0329	03-06-2151	03-06-1151



.062" 1,57mm Diameter Terminals

Electrical:

Resistance: MV voltage drop per amp on mated terminal, ±10%; - 1st engagement 3.2 - 10th engagement 3.4.

High Voltage Test: Withstands 1500 volts RMS for 60 seconds min. applied between adjacent terminals.

Temperature Rise/Operating Range: 30°C maximum for all connectors at maximum rated current.

Current Rating: Amperage rating 5 amps.

Storage Temperature Range: -40°C to 125°C

Mechanical:

Terminal Crimp Strength: Minimum pull-out force in pounds (kilograms) for AWG wire sizes:

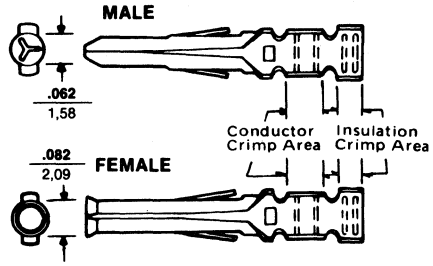
18—20 (9,07)
20—15 (6,80)
22—10 (4,54)
24— 8 (3,63)
26—5 (2,27)
28—3 (1,36)
30—2 (0,91)

Engage/Disengage Forces: Miniature terminal of .008" (0,20mm) stock 70/30 brass. Average engage/disengage forces in plug/receptacle connector with +30% tolerance in pounds (kilograms) by circuit:

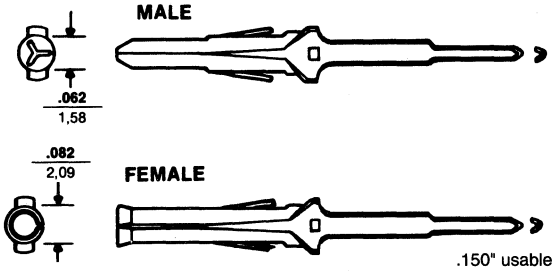
1-circuit	2.3/ 0.8 (1,04/ 0,36)
2-circuit	4.6/ 1.6 (2,09/ 0,73)
3-circuit	6.9/ 2.4 (3,13/ 1,09)
4-circuit	9.2/ 3.2 (4,17/ 1,45)
5-circuit	11.5/ 4.0 (5,22/ 1,81)
6-circuit	13.8/ 4.8 (6,26/ 2,18)
8-circuit	18.4/ 6.4 (8,35/ 2,90)
9-circuit	20.7/ 7.2 (9,39/ 3,27)
12-circuit	27.4/ 9.6 (12,43/ 4,35)
15-circuit	34.5/12.0 (15,65/ 5,44)
24-circuit	55.2/19.2 (25,04/ 8,71)
36-circuit	82.8/28.8 (37,56/13,08)

.006 phosphor bronze stock recommended for versions 15 circuits and larger.

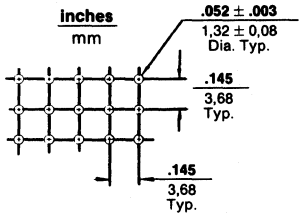
Standard Crimp Terminals



PC Tail Terminals



PCB Hole Layout for 1625 Series only



.150" usable tail length; terminal in standard housing

Crimp Wire Size	Insulation Diameter	Male/Female Series	Chain Form Order Numbers		Loose Form Order Numbers		Application Tooling Order Numbers			
			Male	Female	Male	Female	Hand Tool	TM-42 Die*	Mini Mac Die*	Extraction Tool
Standard Brass .010"										
Tin Plated										
18-24	**.060/.120** 1,52/3,05	1560/1561	•02-06-2101	•02-06-1101	•02-06-2103	•02-06-1103	11-01-0008	11-40-2004	11-18-2017	11-03-0002
24-30	**.040/.090** 1,02/2,29	1854/1855	•02-06-2131	•02-06-1131	•02-06-2132	•02-06-1132	11-01-0037	11-40-2006	11-18-2024	11-03-0002
Select Gold (.000015" min.)										
18-24	**.060/.120** 1,52/3,05	1560/1561	•02-06-6100	•02-06-5100	•02-06-6103	•02-06-5103	11-01-0008	11-40-2004	11-18-2017	11-03-0002
24-30	**.040/.090** 1,02/2,29	1854/1855	•02-06-6130	•02-06-5130	•02-06-6135	•02-06-5135	11-01-0037	11-40-2006	11-18-2024	11-03-0002
Select Gold (.000030" min.)										
18-24	**.060/.120** 1,52/3,05	1560/1561	02-06-6101	02-06-5101	02-06-6102	02-06-5102	11-01-0008	11-40-2004	11-18-2017	11-03-0002
24-30	**.040/.090** 1,02/2,29	1854/1855	02-06-6138	02-06-5138	02-06-6139	02-06-5139	11-01-0037	11-40-2006	11-18-2024	11-03-0002
Select Gold (.000030") in Contact Area - Tin/Lead Crimp Area										
18-24	**.060/.120** 1,52/3,05	1560/1561	02-06-6118	02-06-5108	02-06-6119	02-06-5109	11-01-0008	11-40-2004	11-18-2017	11-03-0002
24-30	**.040/.090** 1,02/2,29	1854/1855	02-06-6143	02-06-5147	02-06-6144	02-06-5148	11-01-0037	11-40-2006	11-18-2024	11-03-0002
Phos-Bronze										
.006" Tin Plated - Recommended for housings of 15 circuits and larger										
18-24	**.060/.120** 1,52/3,05	-/4529	—	•02-06-1104	—	•02-06-1105	11-01-0008	11-40-2106	11-18-2027	11-03-0002
24-30	**.040/.090** 1,02/2,29	-/4559	—	•02-06-1109	—	•02-06-1110	11-01-0185	11-40-2006	11-18-2024	11-03-0002
.008" Tin Plated										
18-24	**.060/.120** 1,52/3,05	1786/1787	•02-06-2201	•02-06-1201	•02-06-2202	•02-06-1202	11-01-0008	11-40-2004	11-18-2017	11-03-0002
24-30	**.040/.090** 1,02/2,29	2190/2189	•02-06-2231	•02-06-1231	•02-06-2232	•02-06-1232	11-01-0037	11-40-2006	11-18-2024	11-03-0002
.006" Select Gold (.000015" min.) - Recommended for housings of 15 circuits and larger										
18-24	**.060/.120** 1,52/3,05	-/4529	—	•02-06-5207	—	•02-06-5208	11-01-0008	11-40-2106	11-18-2027	11-03-0002
24-30	**.040/.090** 1,02/2,29	-/4559	—	02-06-5211	—		11-01-0185	11-40-2006	11-18-2024	11-03-0002
.008 Select Gold (.000015" min.)										
18-24	**.060/.120** 1,52/3,05	1786/1787	02-06-6201	02-06-5201	02-06-6202	02-06-5302	11-01-0008	11-40-2004	11-18-2017	11-03-0002
PC Tail Brass .008" for standard .062 housings only										
Tin Plated										
—	—	1778/1779	—	—	•02-06-8103	•02-06-7103	N/A	—	—	—
Select Gold (.000020 min./Tin Lead Tail Area)										
—	—	1778/1779	—	—	02-06-6122	02-06-7104	N/A	—	—	—

• U.S. Standard product, available through Molex franchised distributors.

* Die only. **Does not include** press or spare tooling

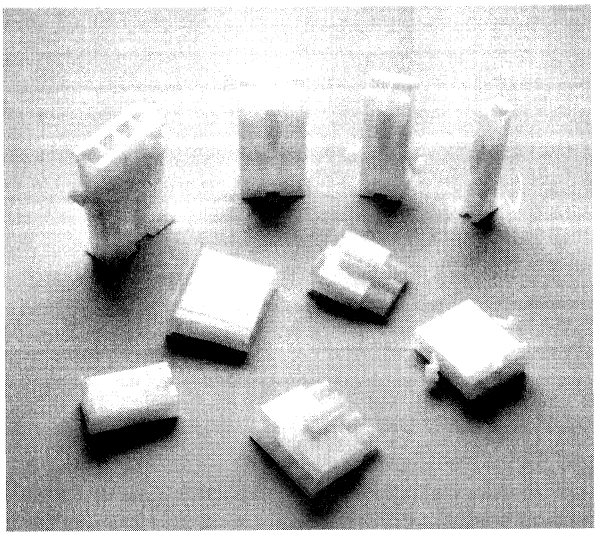
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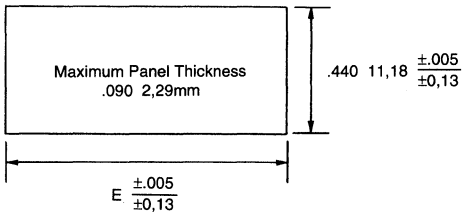
.125" 3,18mm Power Connector

HCS-125

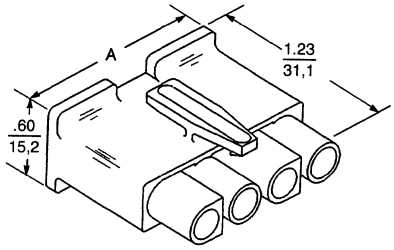
The HCS-125 high current power connector can carry current up to 20 amperes per circuit. This connector meets the need for a connector system rated at greater than the industry standard 12 amperes per circuit. The HCS-125 is an enhanced version of Molex's proven .125" system.

- 20 amperes per circuit*
- 600 volt rating*
- Positive locks
- Pull tabs
- Fully isolated terminals
- 1, 2, 3, 4 circuit housings
- Accommodates 10-18 AWG wire
- UL File No. E-29179, CSA File No. 19980
- Uses Molex standard .125 terminals
- Phosphor bronze terminals available

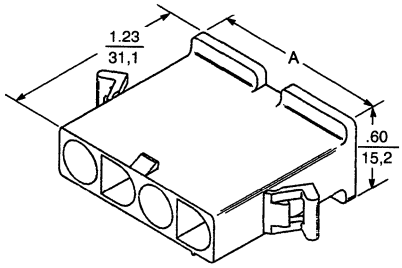




Mounting Hole Detail



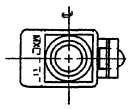
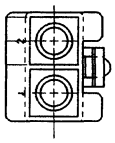
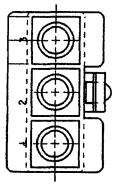
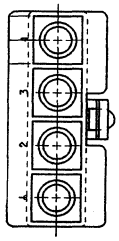
Receptacle



Plug
(Shown with optional panel mounting ears)

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Ordering Information (Order terminals on Page 28K of this catalog)

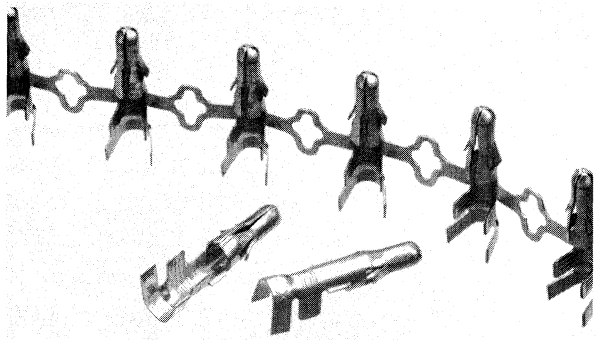
Ckt. I.D. Shown Is Mating Side of Receptacle; Wire Side of Plug				
Series-Circuit Size	**42179-1**	**42179-2**	**42179-3**	**42179-4**
Amperes/Circuit (Max)*	20	20	20	20
Voltage Rating*	600	600	600	600
Dim. A Inch (mm)	0.36 9,1	0.69 17,5	1.02 25,9	1.35 34,3
Receptacle (42179-NR1) Uses Either Male or Female Standard .125" Terminal				
94V-2	03-12-1016	03-12-1026	03-12-1036	03-12-1046
Plug (42179-NP) Uses Either Male or Female Standard .125" Terminal				
Panel Mount 94V-2	03-12-2015	03-12-2025	03-12-2035	03-12-2045
Free Hanging 94V-2	03-12-2016	03-12-2026	03-12-2036	03-12-2046
Panel Cutout "E" Inch (mm)	0.521 13,23	0.851 21,62	1.181 30,00	1.511 38,38

NOTE: *Rating is based on fully loaded housings.

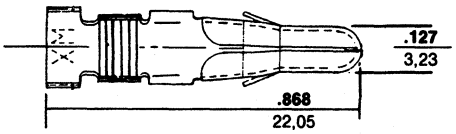
.125" 3,18mm Diameter Terminals

1900/1901/2046/2047/42555/42546/42547
Standard Terminals

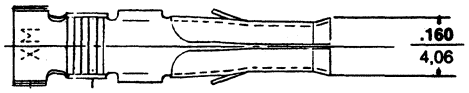
- Use with HCS-125 and standard 125" housings
- Phosphor bronze material available (42546/42547)



Male



Female



Dimensions and Ordering Information

Wire Size AWG	Maximum Insulation Diameter inch mm	Male/Female Series	Chain Form Order Nums.		Loose Form Order Nums.		Application Tooling Order Numbers			
			Male	Female	Male	Female	Hand Tool	TM-42 Die*	Mini Mac Die*	Extraction Tool
Brass										
10-14	.180 4,57	1900/1901	18-12-2601	18-12-1601	18-12-2602	18-12-1602	11-01-0040	11-40-2163	11-18-2147	11-03-0008
16-18	.120 3,04	2046/2047	18-12-2221	18-12-1221	18-12-2222	18-12-1222	11-01-0084	11-40-2164	11-18-2146	11-03-0008
16-18	.180 4,57	42554/42555	18-12-2405	18-12-1605	—	—	—	11-40-2223	11-18-2119	11-03-0008
Phosphor Bronze										
10-14	.180 4,57	42546/42547	18-12-1607	18-12-1603	—	18-12-1604	11-01-0040	11-40-2163	11-18-2147	11-03-0008
16-18	.120 3,04	8946/8947	CF	CF	CF	CF	CF	CF	CF	CF

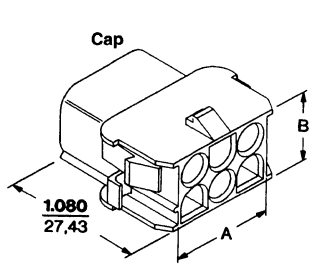
* Die only; Does not include spare tooling.

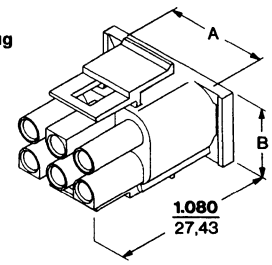
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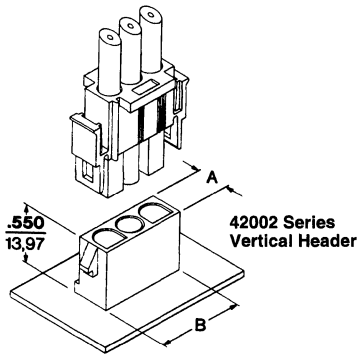
.084" 2,13mm Pin and Socket Power Connector System

MLX Series

- Intermateable, intermountable, and interchangeable with industry standard versions
- Cross tested to assure industry compatibility
- UL recognized, CSA certified
- Up to 13.5 amperes per circuit (30°C rise)*
- 600 Volt rating*
- Positive locks
- Fully isolated contacts
- Circuit I.D. grooves to reduce assembly errors
- Anti-stress positioning tabs to reduce breakage







inch
(mm)

Ordering Information

Ckt. I.D. Shown Is Mating Side of Plug Wire Side of Cap									
Circuit Size		1	2	3	4	6	9	12	15
Amperes/Circuit (Max.)*		—	13.5	13.5	13.5	11	11	—	—
Voltage Rating (Max.)*		600	600	600	600	600	600	600	600
Plug Housing 42021 Series									
94V-2 (White)		50-84-1010	50-84-1020	50-84-1030	50-84-1040	50-84-1060	50-84-1090	—	—
94V-0 (Brick Red)		—	50-84-1021	50-84-1031	50-84-1041	50-84-1061	50-84-1091	—	—
Dimension "A"		.290 7,37	.300 7,62	.300 7,62	.300 7,62	.800 20,32	.800 20,32	.800 20,32	.800 20,32
"B"		.290 7,37	.550 13,97	.800 20,32	1.050 26,67	.550 13,97	.800 20,32	1.050 26,67	1.300 33,02
Cap Housing 42022 Series									
94V-2 (White)		50-84-2010	50-84-2020	50-84-2030	50-84-2040	50-84-2060	50-84-2090	—	—
94V-0 (Brick Red)		—	50-84-2021	50-84-2031	50-84-2041	50-84-2061	50-84-2091	—	—
Dimension "A"		.380 9,65	.300 7,62	.300 7,62	.300 7,62	.800 20,32	.800 20,32	.800 20,32	.800 20,32
"B"		.380 9,65	.550 13,97	.800 20,32	1.050 26,67	.550 13,97	.800 20,32	1.050 26,67	1.300 33,02
Panel Cutout "C"††		N/A	.340 8,64	.340 8,64	.340 8,64	.480 12,19	.480 12,19	.480 12,19	.480 12,19
"D"		N/A	.095 2,41	.095 2,41	.095 2,41	.275 6,99	.275 6,99	.275 6,99	.275 6,99
"E"		N/A	.250 6,35	.250 6,35	.250 6,35	.250 6,35	.250 6,35	.350 8,89	.350 8,89
"F"		N/A	.530 13,46	.530 13,46	.530 13,46	1.030 26,16	1.030 26,16	1.030 26,16	1.030 26,16
"G"		N/A	.565 14,35	.815 20,70	1.065 27,05	.565 14,35	.815 20,70	1.065 27.05	1.315 33,40
Vertical Header Assembly	**A-42002 Series** (Contacts are Phosphor Bronze)								
94V-2 (White) Tin	Male	N/A	10-84-4020	10-84-4030	10-84-4040	10-84-4060	10-84-4090	10-84-4120	10-84-4150
	Female	N/A	10-84-4022	10-84-4032	10-84-4042	10-84-4062	10-84-4092	10-84-4122	10-84-4152
Select Gold	Male	N/A	10-84-4024	10-84-4034	10-84-4044	10-84-4064	10-84-4094	10-84-4124	10-84-4154
	Female	N/A	10-84-4026	10-84-4036	10-84-4046	10-84-4066	10-84-4096	10-84-4126	10-84-4156
94V-0 (Brick Red) Tin	Male	N/A	10-84-4021	10-84-4031	10-84-4041	10-84-4061	10-84-4091	10-84-4121	10-84-4151
	Female	N/A	10-84-4023	10-84-4033	10-84-4043	10-84-4063	10-84-4093	10-84-4123	10-84-4153
Select Gold	Male	N/A	10-84-4025	10-84-4035	10-84-4045	10-84-4065	10-84-4095	10-84-4125	10-84-4155
	Female	N/A	10-84-4027	10-84-4037	10-84-4047	10-84-4067	10-84-4097	10-84-4127	10-84-4157
Dimension "A"		N/A	.300 7,62	.300 7,62	.300 7,62	.800 20,32	.800 20,32	.800 20,32	.800 20,32
"B"		N/A	.550 13,97	.800 20,32	1.050 26,67	.550 13,97	.800 20,32	1.050 26,67	1.300 33,02

* Ratings are per circuit, based on fully loaded housings

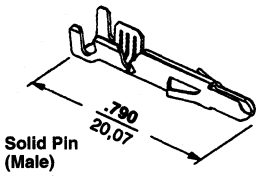
†† Cap housing should be installed into panel in the same direction as the panel cutout is punched

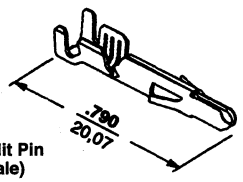
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.084" 2,13mm Pin and Socket Power Connector System

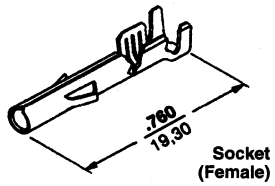
42023/42024 Series Terminals

- Cross tested to assure industry compatibility
- Available in brass or phosphor bronze
- Tin or Select gold plating
- Can be terminated with Molex or commercially available terminating equipment
- Split pin (male) for reduced mating forces





42023 Series



42024 Series

Ordering Information

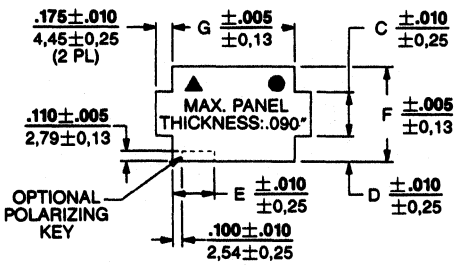
Inches / mm

Wire Size AWG	Insulation Diameter Min./Max.	Male/Female Series	Chain Form		Loose Form		Application Tooling			
			Split Pin (Male)	Socket (Female)	Split Pin (Male)	Socket (Female)	Mini Mac Die	TM40/42 Terminating Die	Hand Tool	Extraction Tool
Standard Brass .012"										
Tin Plated										
#14 to 20	.060 1,52 Min. .130 3,30 Max.	42023/42024	•02-08-2003	•02-08-1001	•02-08-2004	•02-08-1002	11-18-2087 (14-20 AWG)	11-40-2197 (14-16 AWG) 11-40-2198 (16-20 AWG)	11-01-0167	11-01-0168
#18 to 24	.040 1,52 Min. .100 3,30 Max.	42023/42024	—	—	—	—	—	—	—	11-01-0168
Select Gold										
#14 to 20	.060 1,52 Min. .130 3,30 Max.	42023/42024	•02-08-2007	•02-08-1005	•02-08-2008	•02-08-1006	11-18-2087 (14-20 AWG)	11-40-2197 (14-16 AWG) 11-40-2198 (16-20 AWG)	11-01-0167	11-01-0168
#18 to 24	.040 1,52 Min. .100 3,30 Max.	42023/42024	—	—	—	—	—	—	—	11-01-0168
Phosphor-Bronze .012"										
Tin Plated										
#14 to 20	.060 1,52 Min. .130 3,30 Max.	42023/42024	•02-08-2005	•02-08-1003	•02-08-2006	•02-08-1004	11-18-2087 (14-20 AWG)	11-40-2197 (14-16 AWG) 11-40-2198 (16-20 AWG)	11-01-0167	11-01-0168
#18 to 24	.040 1,52 Min. .100 3,30 Max.	42023/42024	—	—	—	—	—	—	—	11-01-0168
Select Gold										
#14 to 20	.060 1,52 Min. .130 3,30 Max.	42023/42024	•02-08-2009	•02-08-1007	•02-08-2010	•02-08-1008	11-18-2087 (14-20 AWG)	11-40-2197 (14-16 AWG) 11-40-2198 (16-20 AWG)	11-01-0167	11-01-0168
#18 to 24	.040 1,52 Min. .100 3,30 Max.	42023/42024	—	—	—	—	—	—	—	11-01-0168

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Mounting Hole Detail

Cap Panel Cutout (Refer to Order Chart for dimensions)



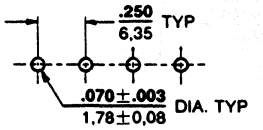
NOTE: Cap Housing should be installed into panel in the same direction as the panel cutout is punched.

▲ - Circuit #1 location when using polarizing key option with 2, 3, and 4 circuit housings.

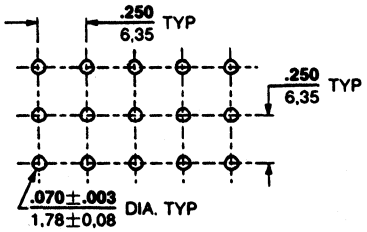
● - Circuit #1 location when using polarizing key option with 6, 9, 12 and 15 circuit housings.

Vertical Header P.C. Board Layout Dimensions

2, 3, & 4 Position Header Assemblies



6, 9, 12, & 15 Position Header Assemblies



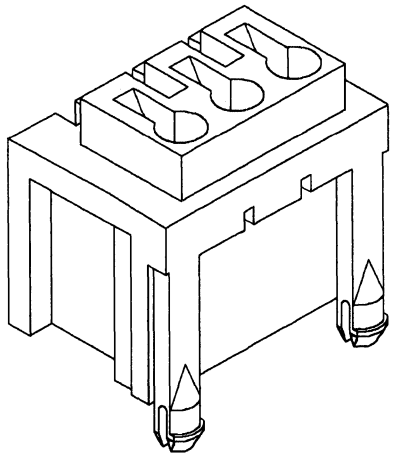
Wire Trap - LITE

The rugged **L**ow cost **I**nterconnection **TE**chnology **(LITE)** wire trap connector is designed for quick connect/disconnect applications. This allows for easy installation in the plant or in the field.

The vertical orientation of this interconnect allows easy access to insert and remove stripped wires.

With the built-in alignment shelf, the LITE easily orients itself to the case.

- Allows fast interconnect to P.C.B.
- Mounting pegs for P.C.B. polarization
- Wire insertion/extraction from vertical direction
- Accommodates 16 - 20 AWG wire (see chart for wire types)
- Can be robotically inserted into P.C.B.



42732

Specifications

Physical:

Terminal: Phosphor Bronze
Plating: Tin
Housing: 94V-0 Polyester

Mechanical:

Temperature Rise: 30°C max. (per U.L. Specifications)
Storage Temperature: -40°C — +105°C max.
Wire pullout force: 10 lbs. min. (18 AWG wire)
Wire Insertion/Extraction cycles: 5 max.

Electrical:

Voltage Rating: 600 V (RMS)
Current Rating: 6.0 amperes per circuit (18 AWG wire)
Contact Resistance: 10 milliohm max.
Insulation Resistance: 1,000 Megohm min.
Dielectric Strength: 1,500 V AC

Agency Approvals

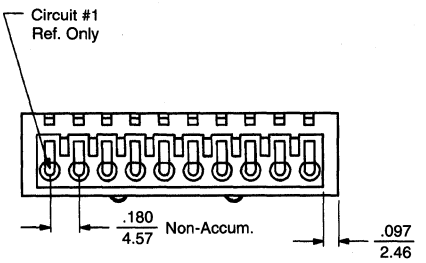
UL File # - E29179
CSA File # - LR19980

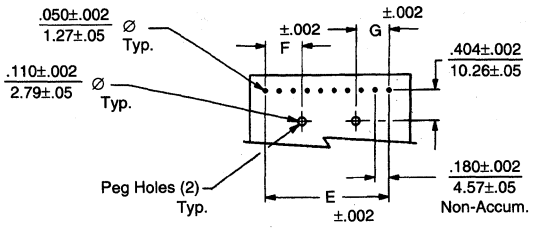
Wire Types

Conductor Diameter Range: .038" - .060" Insulation Outside Dia. Range: .079" - .118"
Suggested Wire Types: 16 AWG Solid 18 AWG Solid or Stranded with Top coat 20 AWG Stranded with Top coat **Suggested UL-Styles:** 16-18 AWG: UL 1007, 1316, 1452 or 1569 18-20 AWG: UL 1015

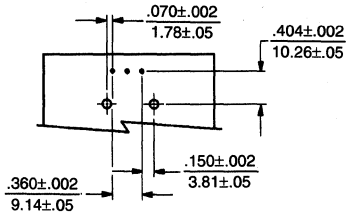
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Wire Trap - LITE

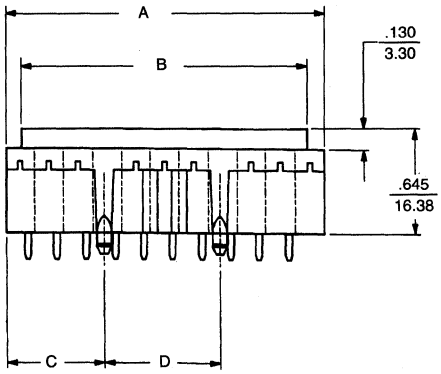


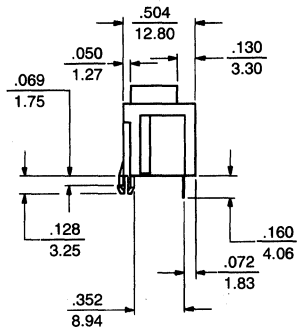


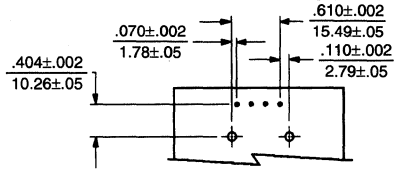
P.C. Board
5, 6, 8 & 10 Circuit Layout



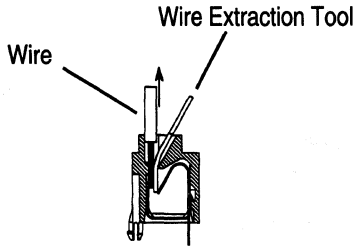
P.C. Board
3 Circuit Layout







P.C. Board
4 Circuit Layout



Wire Extraction Procedure

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Technical Information

Circuit Size	Amperes (max)	Voltage (max)	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G
3	6.0	600	.714 18,14	.520 13,21	.067 01,70	.580 14,73	.360 09,14	see dwg.	see dwg.
4	6.0	600	.894 22,71	.700 17,78	.067 01,70	.720 18,29	.540 13,72	see dwg.	see dwg.
5	6.0	600	1.074 27,28	.800 20,32	.247 06,27	.720 18,29	.720 18,29	.110 02,79	.110 02,79
6	6.0	600	1.254 31,85	1.060 26,92	.247 06,27	.720 18,29	.900 22,86	.110 02,79	.070 01,78
8	6.0	600	1.614 41,00	1.420 36,07	.427 10,85	.720 18,29	1.260 32,00	.290 07,37	.250 06,35
10	6.0	600	1.974 50,14	1.780 45,21	.607 15,42	.720 18,29	1.620 41,15	.470 11,94	.430 10,92

Ordering Information

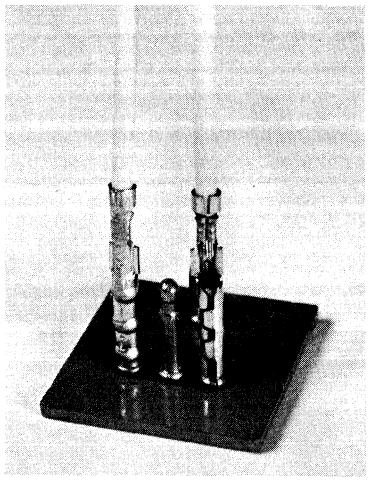
Circuit Size	White Housing	Wire Extraction Tool**
3	•22-45-4036	•11-03-0040
4	22-45-4046	•11-03-0040
5	22-45-4056	•11-03-0040
6	•22-45-4066	•11-03-0040
8	•22-45-4086	•11-03-0040
10	•22-45-4106	•11-03-0040

• U.S. Standard Product, available through Molex franchised distributors
** The extraction tool allows the wires to be removed either one at a time or all at once.
THE POWER SHOULD BE REMOVED BEFORE SERVICING THE PRODUCT.

Wire-to-Board Crimp Terminal Sockets

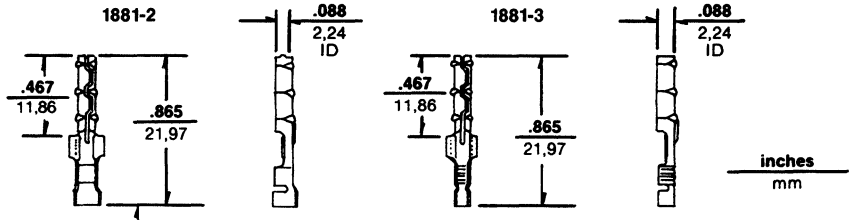
1881 Series

Claspcon™ Crimp Terminal Socket for Round Pins



Molex 1881 Claspcon crimp-type terminals are designed for a single contact connection to a .093" dia. pin (16-06-0005) which has been inserted into a P.C. board. This type of interconnection is especially useful for test set-ups or side connections which must be made on the P.C. board. Two sizes are available, depending upon specified wire size, both in tin-plated brass. Order mating .093" P.C. pin below.

□ **Current rating: 6 Amperes**



Ordering Information

Crimp Wire Size	Insulation Diameter	Eng. No.	1881 Order Number		.093 P.C. Pin Ordering Information		Application Tooling	
			Chain Form	Loose Form	Staking Length	Order No.	Hand Crimp Tool	TM-42 Die
16-24	.138 3,50 Max.	1881-2	02-08-1101	02-08-1102	.109 2,78	16-06-0005	•11-01-0084	11-40-2083
24-30	.030-.060 0,76-1,52	1881-3	02-08-1103	02-08-1104			11-01-0006	11-40-2084

•U.S. Standard Product, available through Molex franchised distributors.

Recommended wire range assumes stranded wire

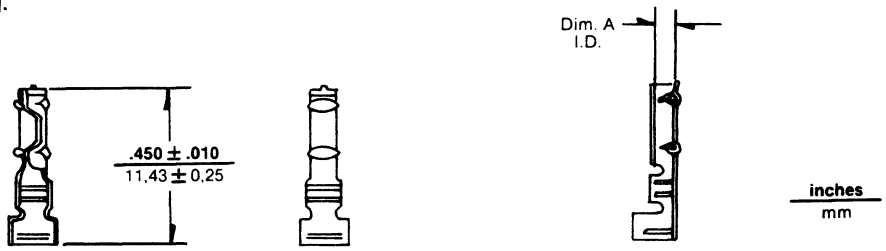
See the Application Tooling section of this catalog for presses and automatic crimping equipment, Molex Mini-Mac™ and TM-42™.

2107 Series

Claspcon™ Crimp Terminal Socket for .045" Pins

Claspcon crimp-type terminals connect to a single circuit .045" 1,14mm wire pin. The pin may be positioned anywhere on a P.C. board, thus eliminating the need to run a circuit to the P.C. board edge. The terminal may be specified in either chain or loose form for automatic or single crimping.

□ **Current rating: 6 Amperes**



Ordering Information

.045 Pin Style	Crimp Wire Size	Insulation Diameter	Dim. A	Brass		Phosphor Bronze		Application Tooling	
				Chain Form Order No.	Loose Form Order No.	Chain Form Order No.	Loose Form Order No.	Hand Crimp Tool Order No.	TM-40/42 Die Order No.
Round	18-24	.060-.120/1,52-3,05	.043 1,09	02-05-1104	02-05-1105	02-05-1204	02-05-1205	11-01-0108	11-40-2014
Round	24-30	.030-.060/0,76-1,52	.043 1,09	02-05-1116	02-05-1117	02-05-1216	02-05-1217	11-01-0108	11-40-2013
Square	18-24	.060-.120/1,52-3,05	.053 1,35	02-05-1106	02-05-1107	02-05-1207	02-05-1208	11-01-0108	11-40-2014
Square	24-30	.030-.060/0,76-1,52	.053 1,35	02-05-1115	02-05-1119	—	—	11-01-0108	11-40-2013

(a) Selective gold plating

(b) Overall gold plating

Recommended wire range assumes stranded wire

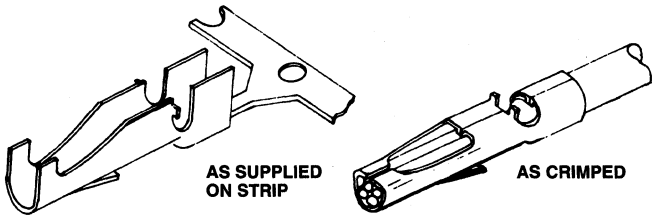
See the Application Tooling section of this catalog for presses and automatic crimping equipment, Molex Mini-Mac™ and TM-42™.

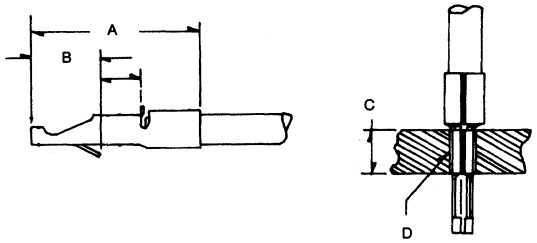
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Wire-to-Board Crimp Terminals

Strain Relief P.C. Board Terminals

- Snap-lock secure wire to P.C. board before wave soldering
- No additional contact resistance
- Wire soldering directly to board
- Rapid and economical means of hand-wiring boards
- Eliminates eyelets on P.C. boards





K

inches
mm

Dimensions

Wire Size	Max. Dia. of Insulation	Eng. No.	Terminal Progression	Dim. A	Dim. B	Dim. C Max. Board Thickness	Dim. D P.C. Board Hole Size
16-18	.115 2,92	4706	.440 11,2	.30 7,7	.12 3,1	.070 1,77	.098 + .003 2,49 + 0,08
18-24	.120 3,05	4706-3	.440 11,2	.30 7,7	.12 3,1	.070 1,77	.075 + .003 1,91 + 0,08
	.120 3,05	5298		.27 6,9	.08 2,1	.070 1,77	.051 + .003 1,30 + 0,08
22-24	.100 2,54	4811	.380 9,7	.32 8,1	.14 3,4	.070 1,77	.051 + .003 1,30 + 0,08
22-26	.060 1,52	4811-1	.380 9,7	.32 8,1	.14 3,4	.070 1,77	.051 + .003 1,30 + 0,08
		41817	.200 5,1	.32 8,1	.14 3,4	.070 1,77	.051 + .003 1,30 + 0,08
		42001	.200 5,1	.27 6,9	.08 2,1	.070 1,77	.051 + .003 1,30 + 0,08
		90198	.236 9,0	.24 6,2	N/A	.070 1,77	.048 + .003 1,20 + 0,08 22 AWG
							.049 + .002 1,27 + 0,03 24/26 AWG
	.067 1,7	5190		.32 8,1	14 3,4	.070 1,77	.048 + .003 1,20 + 0,08

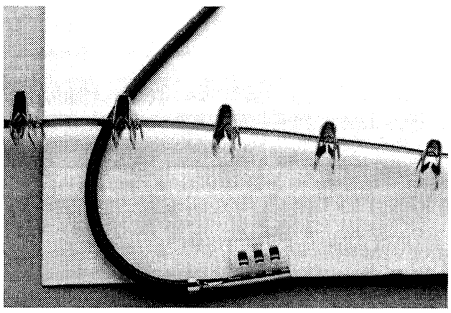
Ordering Information Chain Form (only)

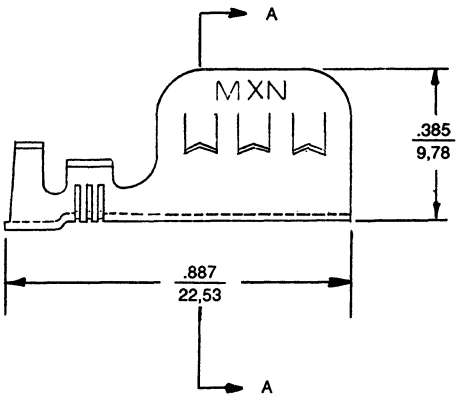
				Application Tooling TM42		
				Die Only	Press and Die	Spare Tooling Kit
Wire Size	Eng. No.	Plating	Order No.	Order No.	Order No.	Order No.
16-18	4706	Tin	02-09-2105	11-40-2042	11-04-0293	11-40-3042
18-24	4706-3	Tin/Lead	02-07-2101	11-40-2043	11-04-0295	11-40-3043
	5298	Tin	08-70-0106	11-40-2115	11-04-0450	11-40-3113
22-24	4811		16-02-0037	11-40-2029	11-04-0277	11-40-3029
22-26	4811-1	Tin	16-02-0034	11-40-2039	11-04-0279	11-40-3039
	5190	Tin	08-70-0060	11-40-2039	11-04-0279	11-40-3039
	41817	Tin/Lead	16-02-0118	11-40-2120	11-04-0595	11-40-3118
	42001	Tin/Lead	40-08-0605	11-40-2171	11-04-0679	11-40-3173
	90198	Tin	910-98-0001	11-40-2196	11-04-0687	11-40-3197

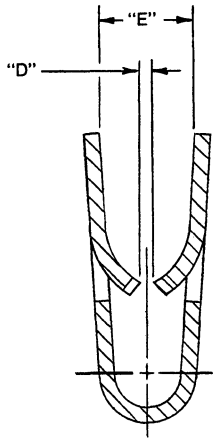
Panel Grounding Clip

42172 Series

- Provides reliable ground to chassis without fasteners
- Simple to install
- Requires no secondary fasteners
- Accepts single and dual crimps
- 14-18 AWG wire
- Rust resistant stainless steel







Section A-A

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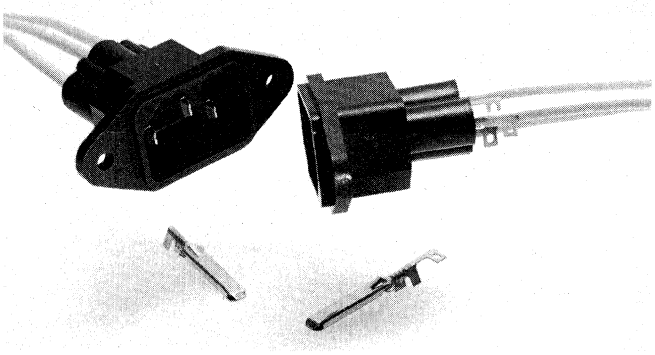
Ordering Information

For use with non-aluminum panels: clip material – .020" stainless steel						Application Tooling
Min. Panel Thickness	Max. Panel Thickness	Wire Range AWG	Dual Crimp Capabilities	Order Number	Eng. Number	Mini-Mac
.015 0,38	.035 0,89	14	2-#16 AWG	40-06-2014	42172-AA	11-18-2139
.015 0,38	.035 0,89	16-18	2-#18 AWG or 1-#18 & 1-#16	40-06-2003	42172-A	11-18-2139
.020 0,51	.030 0,76	16-18	2-#18 AWG or 1-#18 & 1-#16	40-06-2017	42172-F	11-18-2139
.035 0,89	.050 1,27	14	2-#16 AWG	40-06-2015	42172-BB	11-18-2139
.035 0,89	.050 1,27	16-18	2-#18 AWG or 1-#18 & 1-#16	40-06-2005	42172-B	11-18-2139
.060 1,52	.075 1,91	14	2-#16 AWG	40-06-2016	42172-CC	11-18-2139
.060 1,52	.075 1,91	16-18	2-#18 AWG or 1-#18 & 1-#16	40-06-2013	42172-C	11-18-2139
For use with aluminum panels; contact factory						

A.C. Receptacle

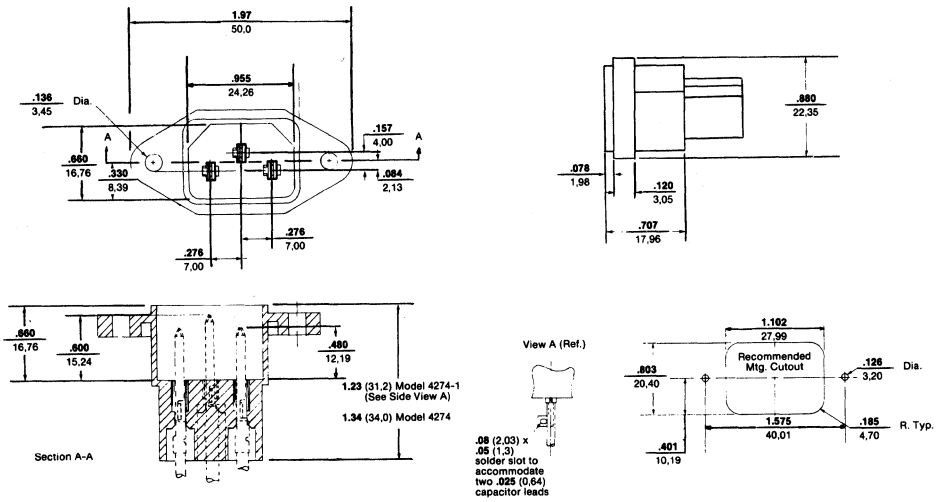
4274 Series

- Low cost
- Terminals become insulated when inserted
- Mount on either side of mounting hole
- Crimp type terminals for lower installed cost
- Excellent mating characteristics
- Seamless contact surface
- Available with solder loops on terminals for filter components
- UL recognized, CSA certified, VDE listed
- 94V-0 nylon
- 15 Amps (UL & CSA) with 16 AWG wire
- 6 Amps (VDE)
- Dual terminal locks



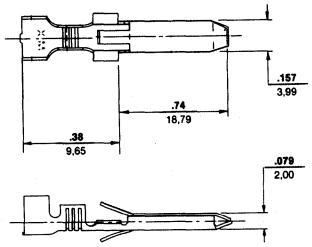
These 3 prong AC connector assemblies are designed for equipment using a power line cord which is pluggable to the equipment.

The key design feature is the crimp-type rectangular pin, Eng. No. 4296. This terminal allows the assemblies to be constructed outside the final assembly area, thus reducing applied costs.

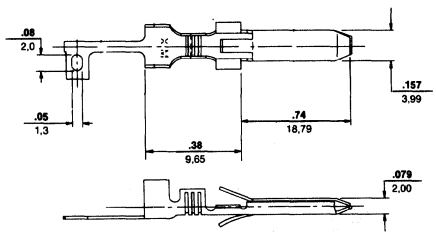


4296 Standard Terminal

Accepts 16-22 AWG Wire



Terminal with Solder Loop



inches
mm

Ordering Information

	Description				Handtool		Extraction Tool		TM40/42 Crimp Terminating Machine					
	Standard - 3 Prong		With Solder Loops For Filter Components						Terminator Die Only		TM40/42 Press and Die		Spare Tooling Kit	
	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	Order No.
Housing	4274	• 15-04-0703	4274-1	15-04-0603	HTR1031E	11-01-0084	HT-4981	11-03-0025	T8325A	11-40-2047	TM40D8325A	11-04-0310	K8325A	11-40-3047
Chain Form Terminals*	4296	• 16-02-1103	4296-1	• 16-02-1104										
Loose Piece Terminals	4296L	16-02-1105	4296-1L	16-02-1106										

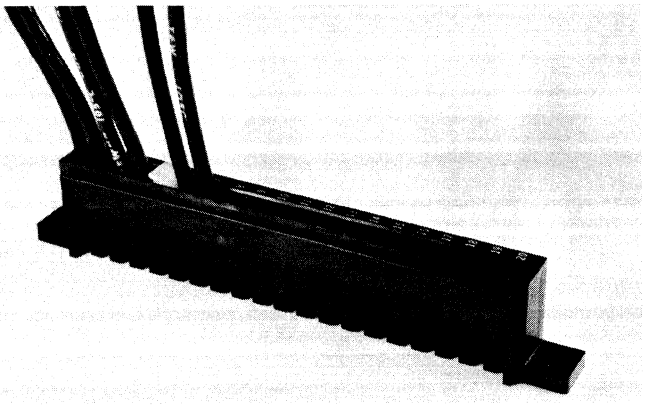
*Terminals Pre-Tinned Brass

• U.S. Standard Product, available through Molex franchised distributors.

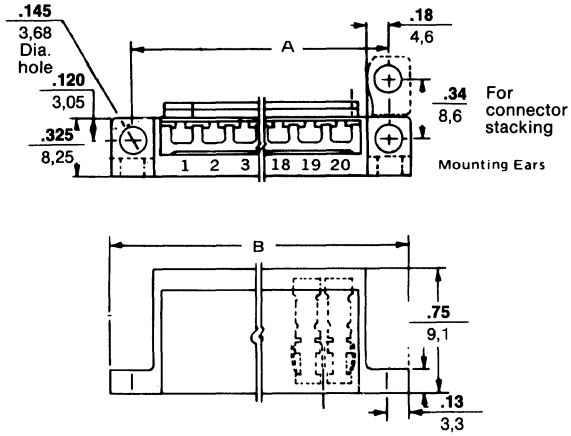
Commoning Connectors

1461 Series

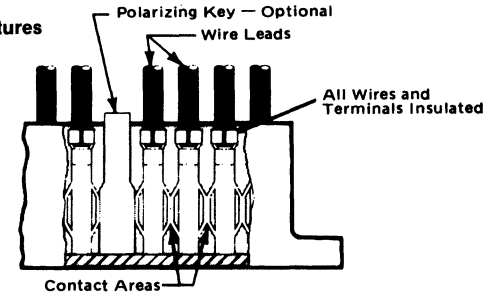
- Replaces terminal blocks
- Fewer parts for inventory
- Low cost housing
- Simplified service
- Stackable side-by-side
- Polarizing keys
- Circuit number identification
- 12 Amps (14 AWG)
- UL recognized
- Order housing and terminals separately



Housing



Housing Features



	Eng. No.	Order No.
POLARIZING KEY	1461-K	15-04-0200

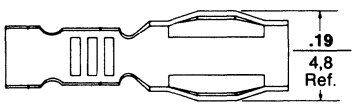
Ordering Information and Dimensions

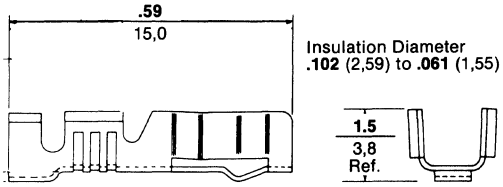
No. of Circuits	Dim. A	Dim. B	Order No.
5	**1.38** 34,9	**1.62** 41,1	• 07-01-7051
10	**2.25** 57,2	**2.49** 63,2	• 07-01-7101
15	**3.13** 79,5	**3.37** 85,6	• 07-01-7151
20	**4.00** 101,6	**4.24** 107,7	• 07-01-7201

• U.S. Standard Product, available through Molex franchised distributors.

K

Terminals, Brass Pre-tinned

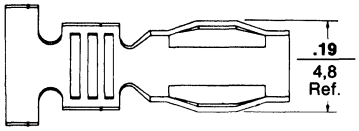


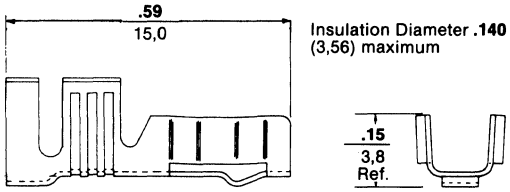


Terminal Contact Areas



1457-1 Series for 18-22 AWG wire





1457-2 Series for 14-16 AWG Wire

Inches
mm

Ordering Information and Dimensions

Eng. No.	Wire Size	Max. Ins. Dia.	Order No.		Handtool		TM40/42						Insertion Tool		Extraction
							Terminator Die Only		TM40/42 Press & Die		Spare Tooling				
			Chain	Loose	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	
1457-1	18-22	1.02 2,59	• 05-02-0047	• 05-02-0048	HTR-1031E	11-01-0084	T8307A	11-40-2009	TM40D8307A	11-04-0213	K8307A	11-40-3009	HT-1461	11-02-0007	N/A
1457-2	14-16	.140 3,6	• 05-02-0049	• 05-02-0050			T8307B	11-40-2010	TM40D8307B	11-04-0215	K8307B	11-40-3010			N/A

• U.S. Standard Product, available through Molex franchised distributors.
Recommended wire range assumes stranded wire.
For crimp tools see the Application Tooling Section of this catalog.

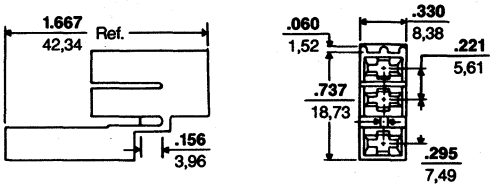
Relay and Switch Connectors

1852, 2211, 2191, 2177, 42354 Series

- 11 circuit standard relay version (2177)
- 14 circuit miniature relay version (1852)
- 94V-2 nylon
- 1 & 3 circuit switch connectors (2211 & 2191)
- U.L. approved
- Accepts 14 through 28 AWG
- Optional detent available for increased holding action

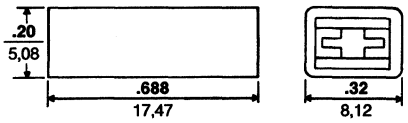


2191-3 Switch Connector

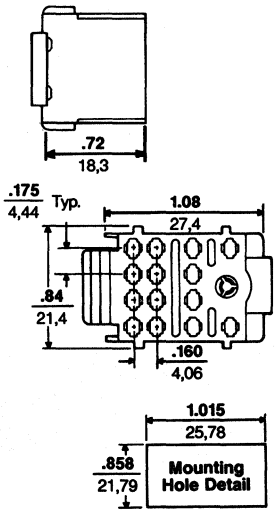


inches
mm

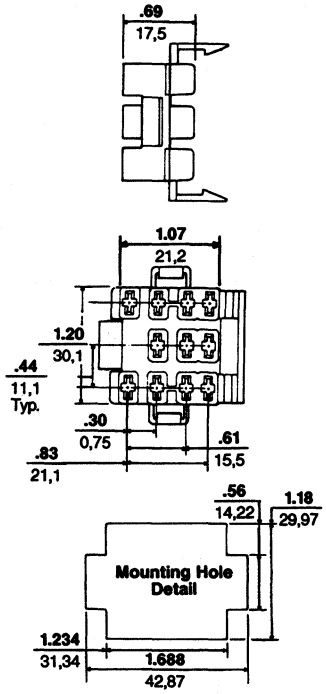
2211 Switch Connector



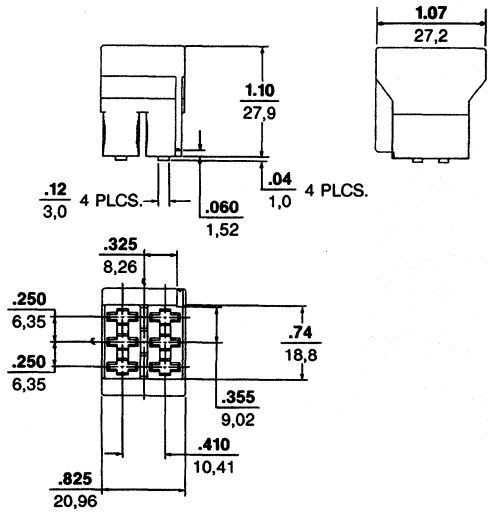
1852 Relay Connector



2177-1 Relay Connector



42354-0001 Switch Connector



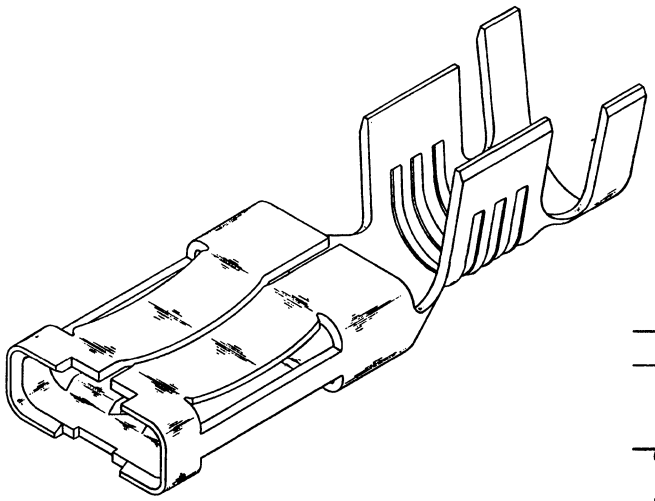
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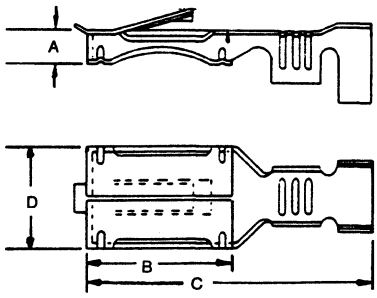
Ordering Information

No. Circuits	Max. Current Rating	Max. Voltage Rating	Mtg. Ears	Max. Panl Thickness	Eng. No.	Order No.	Uses Terminal No.
1	10	250	No	N/A	2211	06-02-3011	2176, 2328, 2576, 2698, 2799
3	10	250	No	N/A	2191	06-02-3031	2176, 2328, 2576, 2698, 2799
6	15	250	No	N/A	42354	06-02-1061	41422
11	8	125	Yes	.050 1,27	2177-1	06-02-3111	2176, 2328, 2576, 2698, 2799
14	5	250	Yes	.050 1,27	1852-R2	06-02-3143	1943
			Yes	.080 2,03	1852-R	06-02-3141	1943

Relay and Switch Terminals

1943, 2176, 2328, 2576, 2698, 2799, 41422 Series





Dimensions

Eng. No.	1943	2176	2328	2576	2698	2799	Low Force 41422	
Engagement/Disengagement Forces in Lbs.							4.5/1.5	
Wire Size (AWG)	18-24 AWG	14-22 AWG	14-22 AWG	14-22 AWG	14-22 AWG	14-22 AWG	10-12 AWG	14-18 AWG
Max, Insulation Dia.	.110 2,67	.135 3,43	.125 3,18	.135 3,43	.125 3,18	.060 1,52	.190 4,83	.139 3,53
Material Thickness	.011 0,28	.010 0,25	.010 0,25	.012 0,30	.012 0,30	.012 0,30	.016 0,41	.016 0,41
Mating Tab Size	.100 x .020	.187 x .020	.187 x .020	.187 x .020	.187 x .020	.187 x .020	.250 x .032	.250 x .032
Dim. A	.03 0,9	.07 1,8	.07 1,8	.08 0,9	.08 0,9	.08 0,9	.08 0,9	.08 0,9
Dim. B	.30 7,5	.28 7,1	.28 7,1	.28 7,1	.28 7,1	.28 7,1	.46 11,7	.46 11,7
Dim. C	.60 15,2	.61 15,5	.62 15,7	.61 15,5	.61 15,5	.61 15,5	.91 23,1	.91 23,1
Dim. D	.13 3,3	.24 6,1	.24 6,1	.24 6,1	.24 6,1	.24 6,1	.30 7,5	.30 7,5

Ordering Information

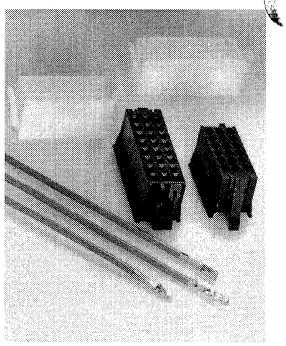
Eng. No.		1943	2176	2328	2576	2698	2799	41422	
Wire Size (AWG)		18-24 AWG	14-22 AWG	14-22 AWG	14-22 AWG	14-22 AWG	14-22 AWG	10-12 AWG	14-18
W/Detent	Chain Form	N/A	05-06-0301	05-06-0401	N/A	N/A	N/A	N/A	N/A
	Loose Form	N/A	05-06-0302	05-06-0403	N/A	N/A	N/A	N/A	N/A
W/O Detent	Chain Form	05-06-0200	05-06-0303	05-06-0402	05-06-0305	05-06-0405	05-06-0307	40-02-1601	40-02-1602
	Loose Form	05-05-0201	05-06-0304	05-06-0404	05-06-0306	05-06-0406	05-06-0308	N/A	N/A
Application Tooling	Hand Tool	11-01-0008	11-01-0101	11-01-0101	11-01-0101	11-01-0101	11-01-0006	N/A	N/A
	TM-40/42 Die	11-40-2035	11-40-2015	11-40-2015	11-40-2015	11-40-2006	11-40-2154	11-40-2192	11-40-2193
	Mini-Mac	N/A	11-18-2040	11-18-2040	11-18-2040	N/A	11-18-2041	11-18-2080	11-18-2081

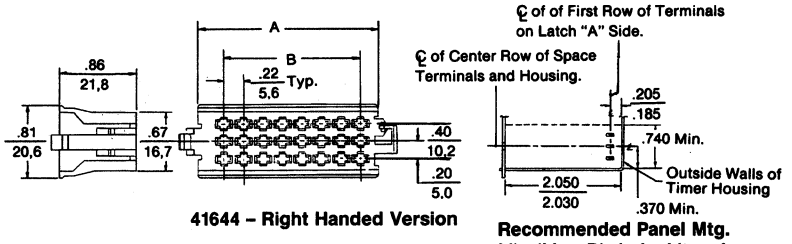
K

41644/41645

Timer Receptacle Housing

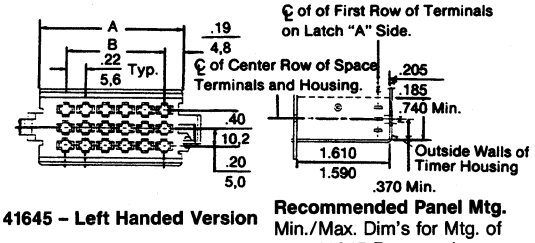
- Positive locking latches
- Fully polarized, color-coded right – (41644) and left – (41645) handed configurations
- Flared wire entry ports for double wire crimps
- Accepts standard and low force designs of 1508 Series terminal
- Material, 94V-2 nylon
- UL recognized; CSA certified





41644 – Right Handed Version

Recommended Panel Mtg.
Min./Max. Dim's for Mtg. of 41644 Receptacle



41645 – Left Handed Version

Recommended Panel Mtg.
Min./Max. Dim's for Mtg. of 41645 Receptacle

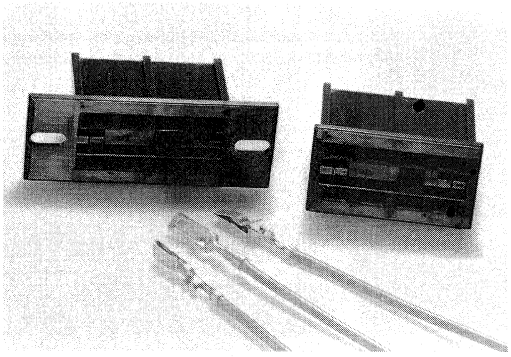
Ordering Information

Ckt. Size	Dim. A	Dim. B	41644 Right Hand	41645 Left Hand	Terminal
18	1.59 40,4	1.10 27,9	06-02-1186	06-02-1185	05-06-0113
24	2.03 51,6	1.54 39,1	06-02-1246	06-02-1245	

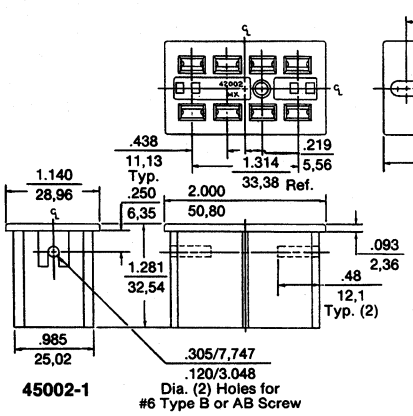
45002

8 Position Coin Changer Receptacle for Vending Machines

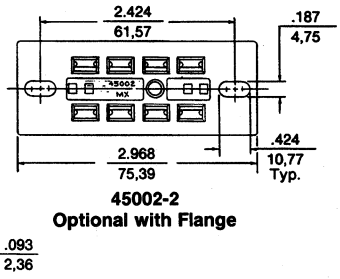
- Vending industry standard for single-price coin changers
- Mates with plug provided on coin changers manufactured by Mars, Coinco, and others
- Available in front and side mounting versions
- Crimp terminals eliminate fast-ons
- 94V-2 nylon housing
- UL & CSA
- Uses Molex 2697 and 2699 terminals



45002-1 **45002-2**



45002-1



45002-2
Optional with Flange



2697 & 2699 Terminal

inches
mm

Ordering Information 45002

Circuits	Flange	Eng. No.	Order No.
8	No	45002-1	15-04-0451
8	Yes	45002-2	15-04-0453

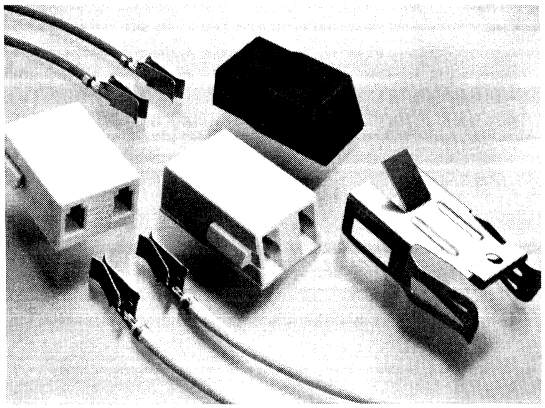
Ordering Information 2697, 2699 Terminals

Crimp Wire Size	Insulation Diameter	Finish	Eng. No.	Chain Form Order No.	Mini-Mac
12-20	.188	Tin Plated	2699	05-02-0075	11-18-2095
12-20	.230	Plain Brass	2697	05-01-0064	11-18-2096

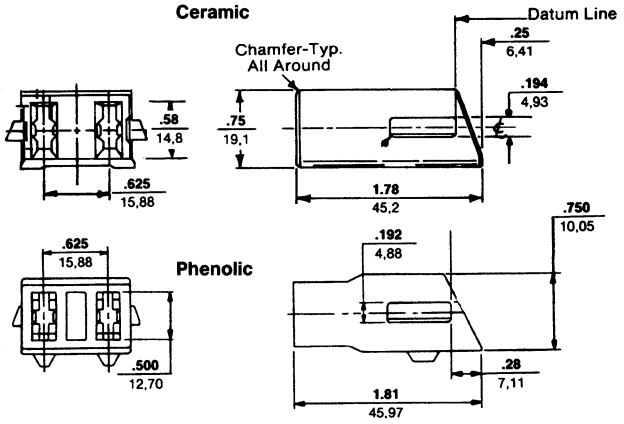
Ceramic and Phenolic Range Receptacles

Range Receptacles, Terminals & Mounting Clips

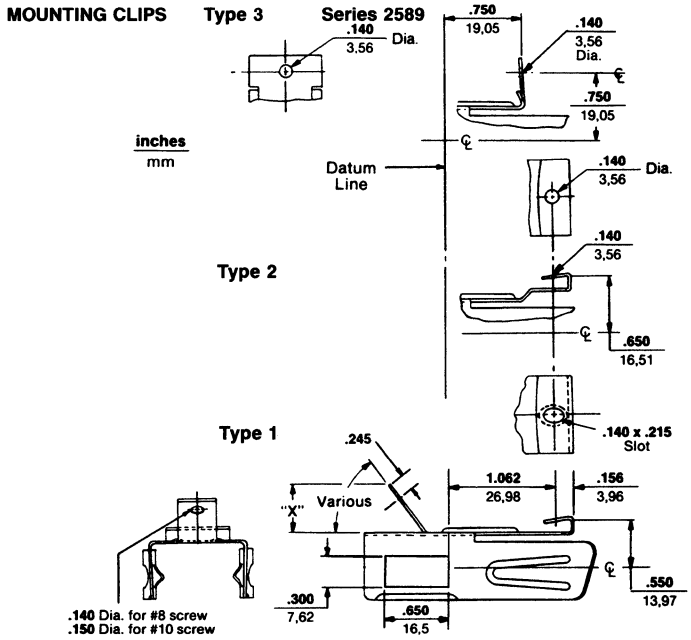
- U.L. recognized
- CSA certification granted on individual application basis only
- Trouble free assembly
- Long product life
- Choice of mounting bracket configurations
- Receptacles provide easy disconnect from heating element on range surface
- Alternate terminals can be used in both ceramic and phenolic housings without changing termination equipment
- High density ceramic withstands high impact without shattering



RANGE RECEPTACLES



MOUNTING CLIPS



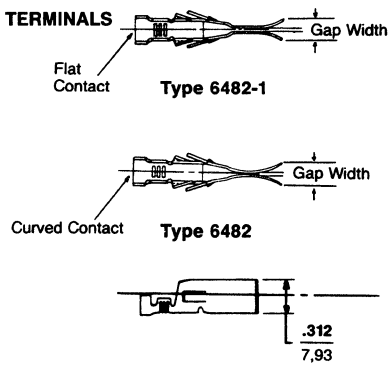
Ordering Information Range Receptacles

Description	Temp. Range	Eng. No.	Order No.
Ceramic Receptacle	200°-300°C	2481-13	50-16-0283
Phenolic Receptacle	0°-200°C	2481	50-16-0281

Ordering Information Mounting Clips

Contact factory for technical assistance based on clip type, tab angle, desired "X" dimension and mounting screw size.

TERMINALS



Heater Element Terminal Thickness Range
.080 2,032 – .095 2,413*
.090 2,286 – .105 2,667*

*Heater elements not interchangeable in same terminal.

Ordering Information Terminals

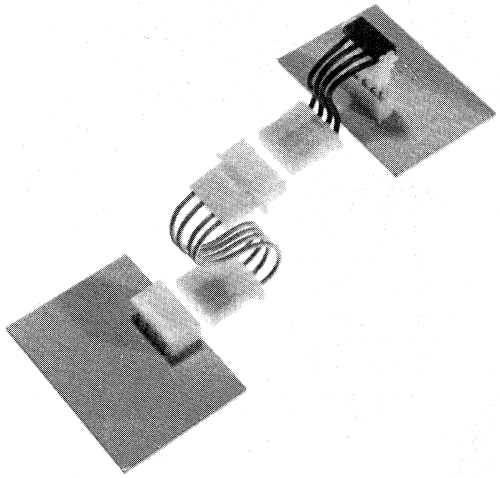
Automated application equipment can be used to crimp either terminal. Automatic and semi-automatic application tooling available, contact factory.

Wire Size	Terminal Material	Contact Type	Gap Width	Eng'g Number	Order No.	Mini-Mac	TM-40/42
14-18 AWG	Beryllium Copper Alloy	Curved	.210 5,3	6482-2 (Chain)	05-12-1104	11-18-2036	11-04-0632
		Flat	.210 5,3				
	Standard Copper Alloy	Curved	.210 5,3	6482- (Chain)	05-12-1100	11-18-2036	11-04-0632
			.165 4,2				
		Flat	.210 5,3	6482-1 (Chain)	05-12-1102	11-18-2036	11-04-0632

K

Disk Drive Power Connection System, Crimp Connectors

8981 / 53109 53113 Series



- Wire-to-board and wire-to-wire connector system
- Crimp version
- Wire connectors have end grips for easy unmating
- Detents provide firm positive fit
- U.L. listed File No. E29179; CSA listed

Specifications

Mechanical:

Mating Force - 4.0 lbs. max. per contact

Unmating Force - 1.5 lbs. min. per contact after 30 cycles

Contact Retention in Housing - 4.0 lbs. min.

Electrical:

Voltage - 250V AC

Current Rating -
10 amp - 8981-4V/4SM
6.5 amp - 8981-4R
5 amp - 53109/53113

Contact Resistance - 20 MΩ max. (milliohms)

Insulation Resistance - 500 MΩ (megohms)

Dielectric Strength - 1500 VAC

Environmental:

Temperature - -40°C — +105°C

K

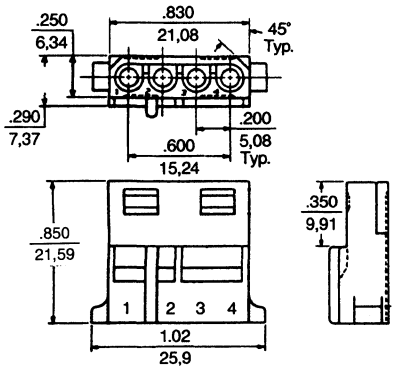
* Please contact factory for current product specifications for approval testing or inspection.

Disk Drive Power Connection System

8981-4P

Crimp Terminal and Housing

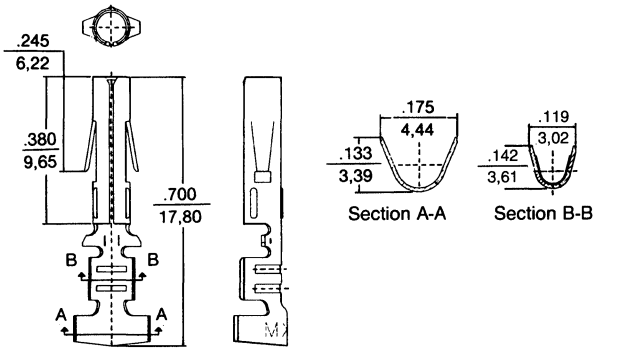
- Mates with 8981 4M/4V/4R/4SM series
- 94V-2 nylon material, natural color
- Crimp equivalent of 70156
- Wire range 14-20 AWG, 18-22 AWG available



Ordering Information - Housing

Order No.	Eng. No.
15-24-4048	8981-4P

Terminals for 8981-4P Housing



inches / mm

- For use with 14-20 AWG wire
- Tin plated
- Low force version available. Contact factory.

Crimp Hand Tool Order No.
11-01-0123

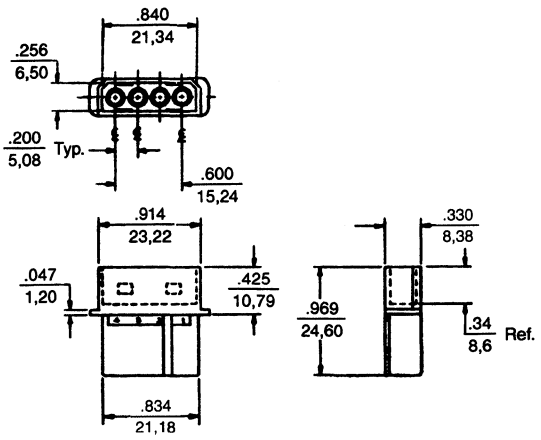
Ordering Information - Terminal

Order No.	Eng. No.	Form	Contact Material
02-08-1201	8980-3C	Chain	Phosphor Bronze
02-08-1202	8980-3L	Loose	Phosphor Bronze
02-08-1215	8980-2C	Chain	Brass
02-08-1216	8980-2L	Loose	Brass

8981-4M

Crimp Terminal and Housing

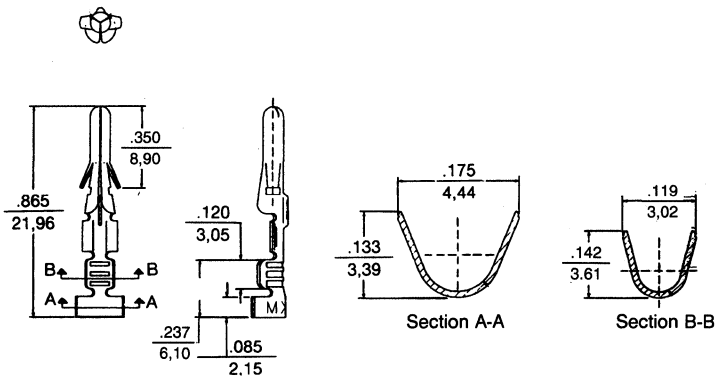
- Mates with 70156 IDT or 8981-4P crimp connectors
- 94V-2 nylon material, natural color
- Wire range 14-20 AWG, 18-22 AWG available



Ordering Information - Housing

Order No.	Eng. No.
15-24-4047	8981-4M

Terminals for 8981-4M Housing



- For use with 14-20 AWG wire
- Phosphor bronze, tin plated

Crimp Hand Tool Order No.
11-01-0152

Ordering Information - Terminal

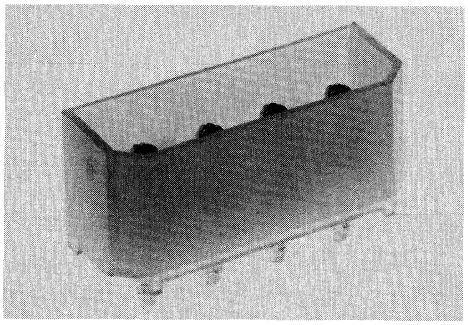
Terminal Order No.	Eng. No.	Form
02-08-1205	8980-4C	Chain
02-08-1206	8980-4L	Loose

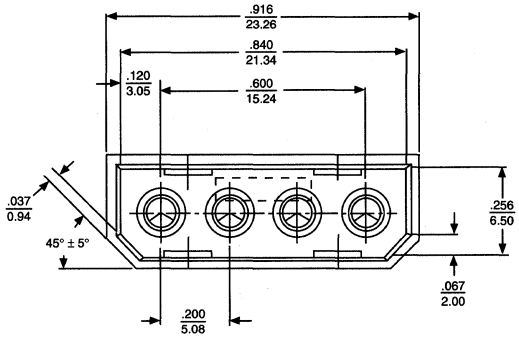
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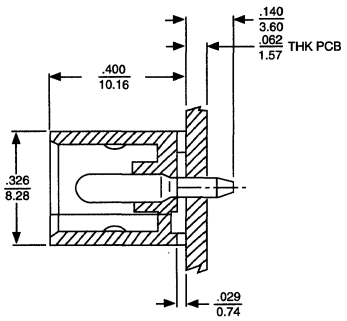
Disk Drive Power Connection System

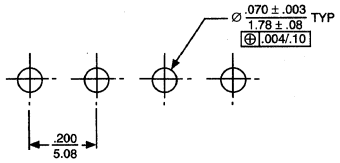
8981-4V
Vertical Mount Header

- Mates with 70156 IDT or 8981-4P connectors
- Optional drain hole version available, contact factory
- Terminals - phosphor bronze
- Plating - tin/lead over copper
- Housing - 94V-2 nylon 6/6









PCB LAYOUT

inches
mm

Ordering Information

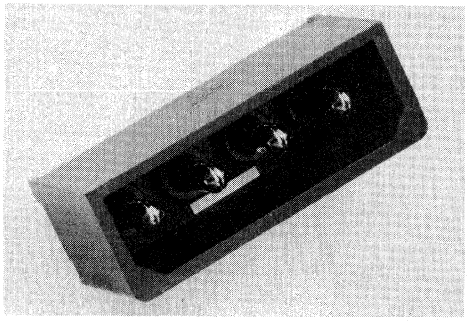
Eng. No.	Order No.	P.C. Tail Length
8981-4V Vertical Mount	•15-24-4049	.140 3,60

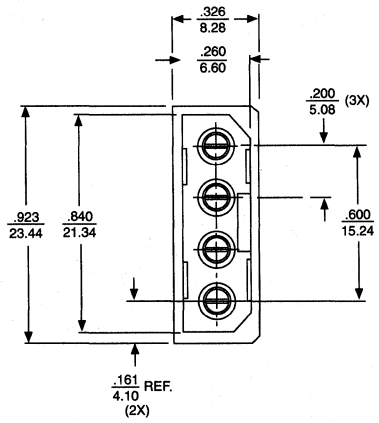
•U.S. Standard Product, available through Molex franchised distributors.

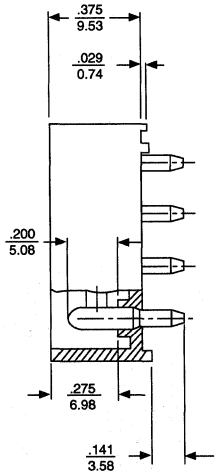
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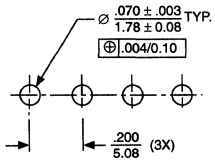
8981-4V4/4V5/4V6
Vertical Mount Header High Temperature Version

- Mates with 70156 IDT or 8981-4P connectors
- Drain hole
- Anti-wicking PC tails
- Polarization peg available
- Terminals - phosphor bronze
- Plating - tin/lead over copper
- Housing - high temperature thermoplastic









PCB LAYOUT

inches
mm

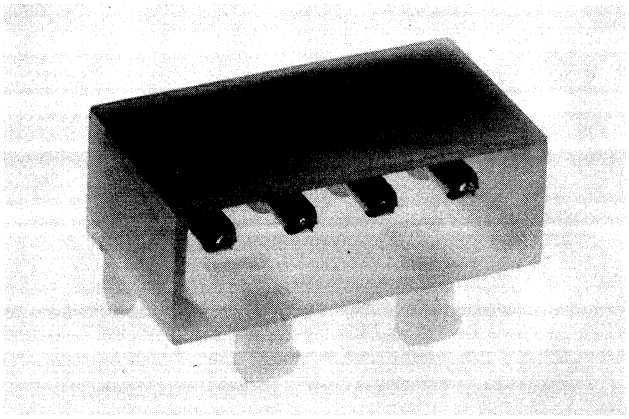
Ordering Information

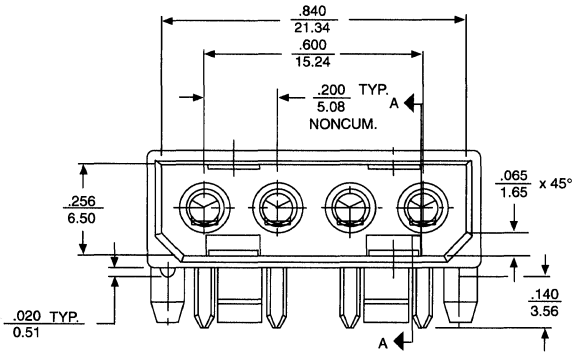
Eng. No.	Order No.	P.C. Tail Length	Peg
8981-4V4 Vertical Mount	15-24-4157	.083 2,12	No
8981-4V5 Vertical Mount	15-24-4345	.140 3,60	No
8981-4V6 Vertical Mount	15-24-4342	.083 2,12	Yes

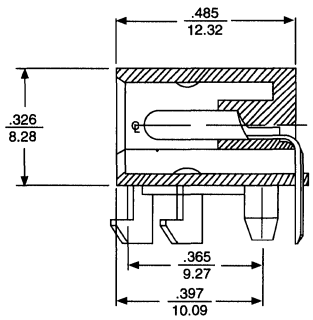
Disk Drive Power Connection System

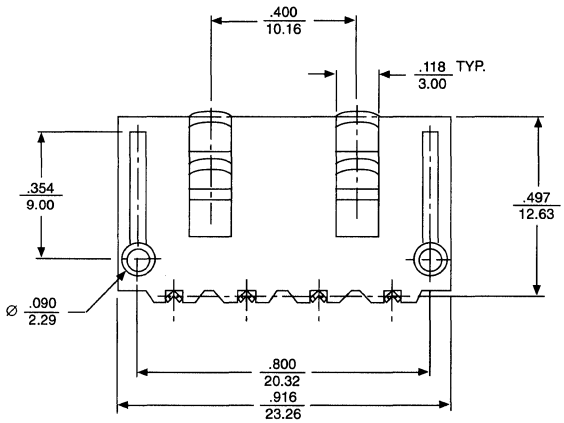
8981-4R-1
Right Angle Header

- Mates with 70156 IDT or 8981-4P connectors
- Terminals - phosphor bronze
- Plating - tin/lead over copper
- Housing - 94V-2 nylon 6/6

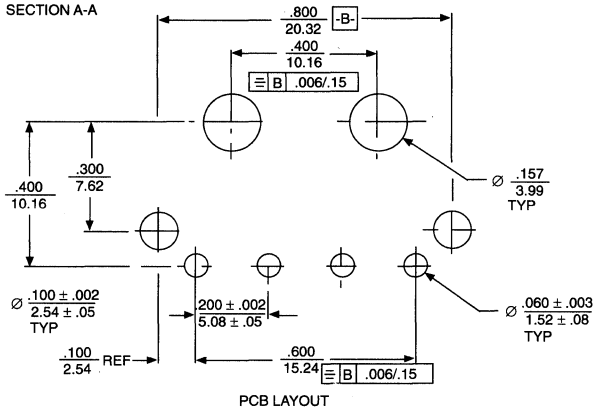








SECTION A-A



PCB LAYOUT

Ordering Information

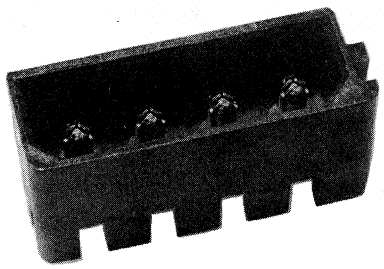
Eng. No.	Order No.	P.C. Tail Length
8981-4R-1 Right Angle	•15-24-4041	.14 3,56

•U.S. Standard Product, available through Molex franchised distributors.

K

Disk Drive Power Connection System

8981-4SM Series
Introduction



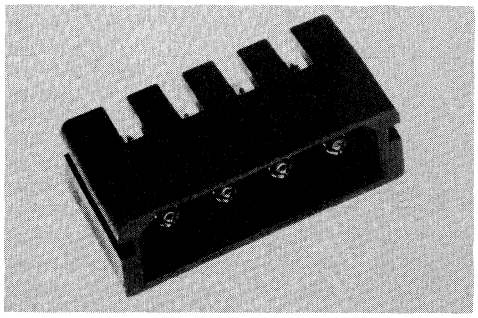
The Molex 8981-4SM series of connectors offer low profiles and space-saving features for disk drive I/O connections. These surface mount connectors come in high temperature material to withstand vapor phase and IR soldering, and have compliant gull-wing solder tails that insure stable retention.

All the connectors are UL/CSA approved, and mate with Molex 70156 IDT or 8981 crimp connectors. Various profile heights and slot orientations are offered to meet different board layouts.

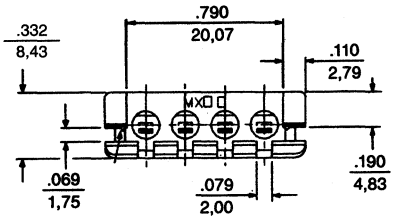
- Housing: High temperature material 94V-0
- Color: Black
- Terminals: phosphor bronze
- Current Rating: 10 amps
- Voltage: 250V AC
- Plating: tin/lead

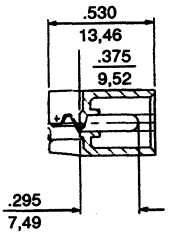
NOTE: These specifications apply for all 8981-4SM Series.

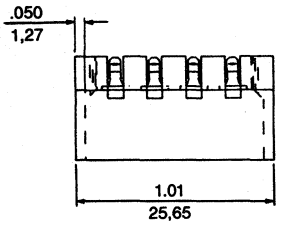
8981-4SM1
Standard Profile SMT Header

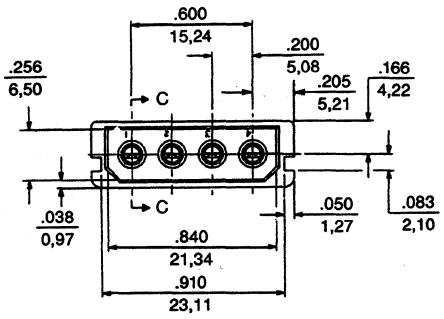


- High temperature thermoplastic
- Dual slot orientation
- Mates with 70156 IDT or 8981-4P connectors

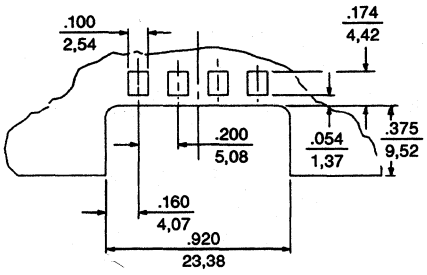








Recommended P.C. Board Layout



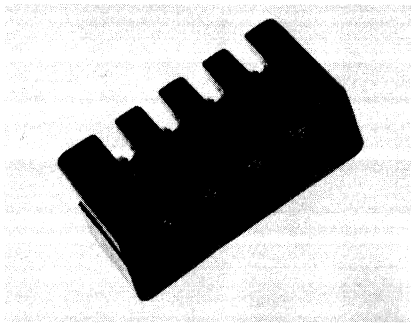
Ordering Information

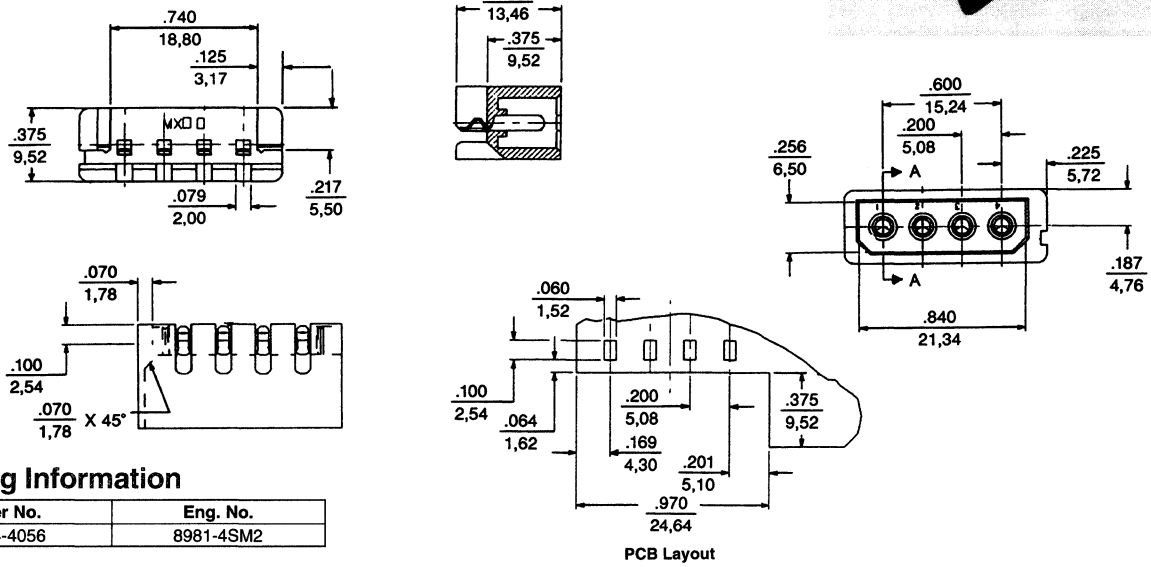
Order No.	Eng. No.
15-24-4055	8981-4SM1

Disk Drive Power Connection System

8981-4SM2
High Profile SMT Header

- High temperature thermoplastic
- Single slot orientation
- Mates with 70156 IDT or 8981-4P connectors





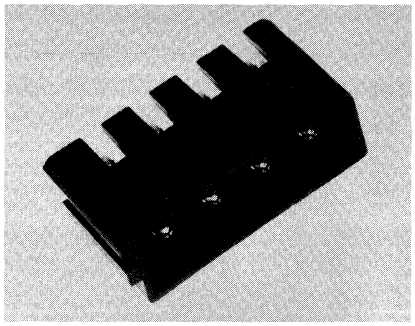
PCB Layout

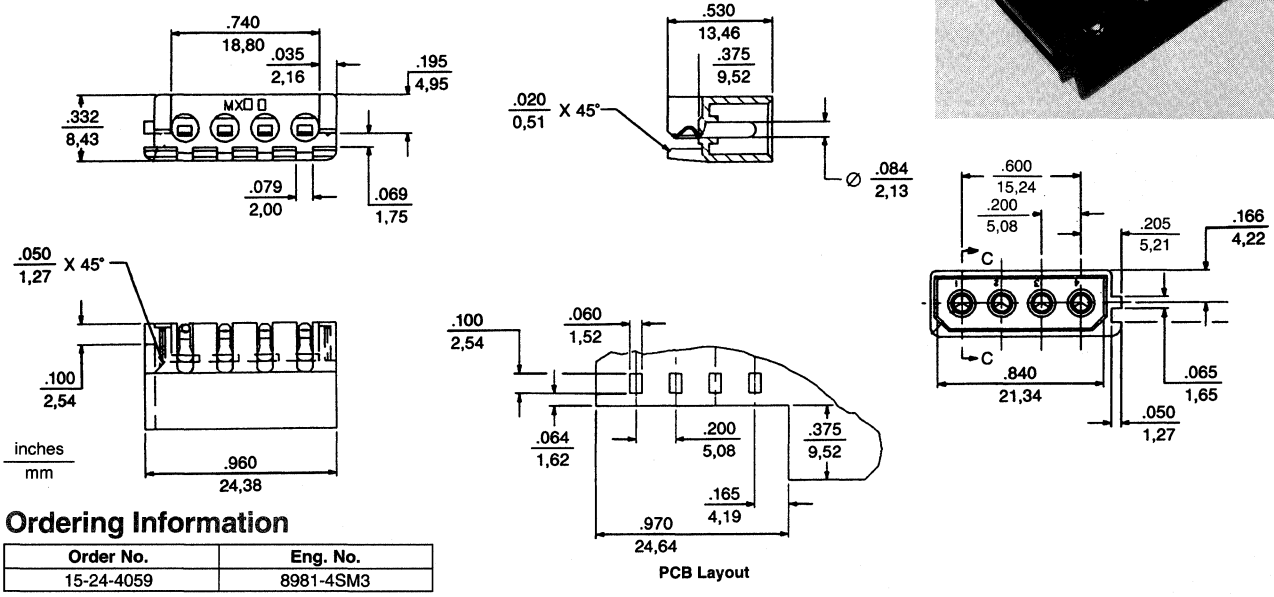
Ordering Information

Order No.	Eng. No.
15-24-4056	8981-4SM2

8981-4SM3
Standard Profile SMT Header

- High temperature thermoplastic
- Single slot orientation
- Mates with 70156 IDT or 8981-4P connectors





PCB Layout

Ordering Information

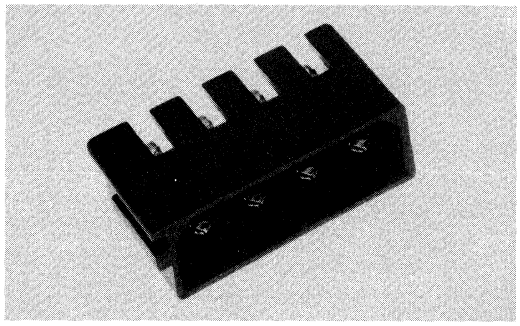
Order No.	Eng. No.
15-24-4059	8981-4SM3

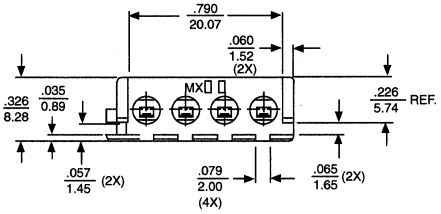
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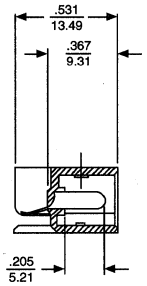
Disk Drive Power Connection System

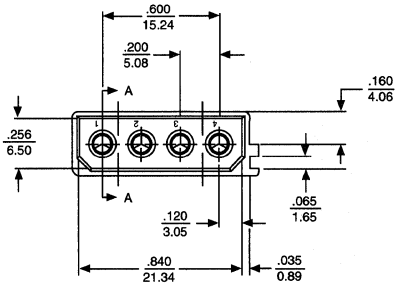
8981-4SM4C Series
Low Profile SMT Header

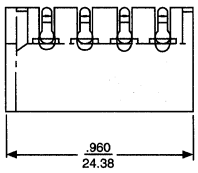
- Single slot orientation
- High temperature nylon
- Mates with 70156 IDT or 8981-4P connectors



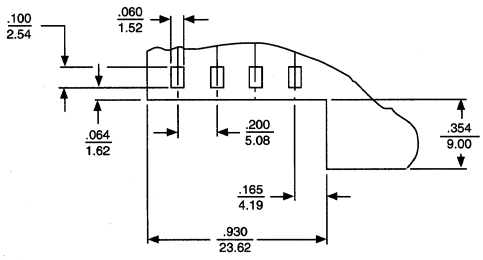








PCB LAYOUT



inch
mm

Ordering Information

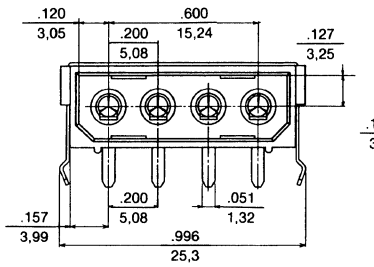
Order No.	Eng. No.
15-24-4145	8981-4SM4C

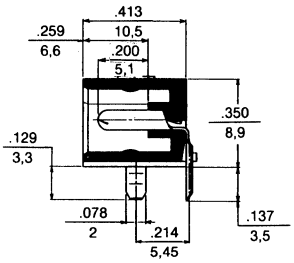
Disk Drive Power Connection System

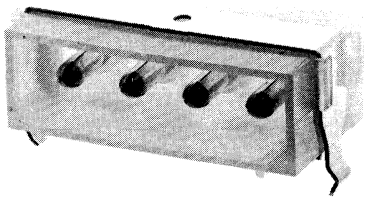
53109/53113
Right Angle Header with Strap

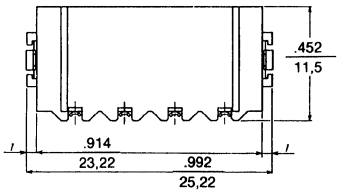
- Mates with 70156 IDT Or 8981-4P crimp connectors
- Housing - 94V-2 nylon 6/6 natural color
- Pre-assembled with metal strap
- Plating - tin over copper
- Current rating 5 amps, right angle
- Voltage rating 250 volts AC
- Terminals - phosphor bronze

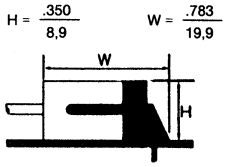
53109-0410
Standard Polarization

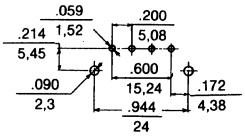












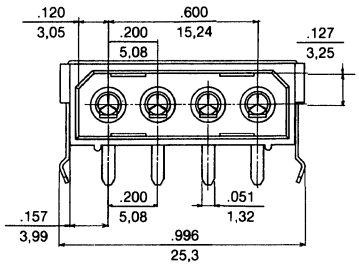
P.C. Board Layout

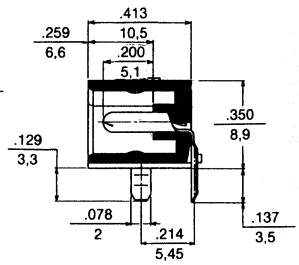
inches
mm

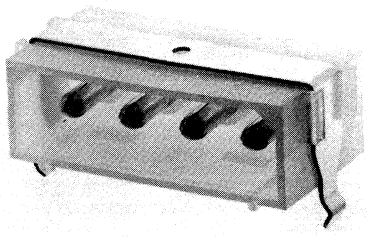
Ordering Information

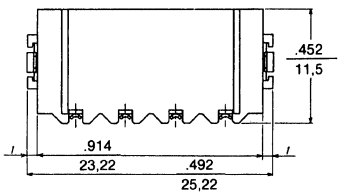
Eng. No.	Order No.	P.C. Tail Length
53109-0410 Standard Polarization	531-09-0410	.13 3,50

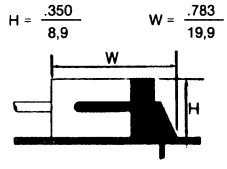
53113-0410
Reverse Polarization

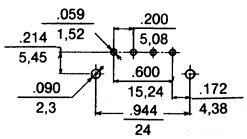












P.C. Board Layout

Ordering Information

Eng. No.	Order No.	P.C. Tail Length
53113-0410 Reverse Polarization	531-13-0410	.13 3,50

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Disk Drive Power Connection System, IDT Connectors

70156 Series
IDT Female Connector

- ☐ Wire-to-wire and wire-to-board insulation displacement
- ☐ End grips for easy unmating
- ☐ Housing detents provide positive retention
- ☐ Locking IDT wire strain relief cover
- ☐ Tooling: Hand and arbor press
- ☐ UL Recognized File # E-29179
  CSA Certified File # LR19980

Mechanical:

Terminal: Phosphor bronze, tin plated

Housing: 94V-0 white thermoplastic
94V-2 natural thermoplastic

Electrical:

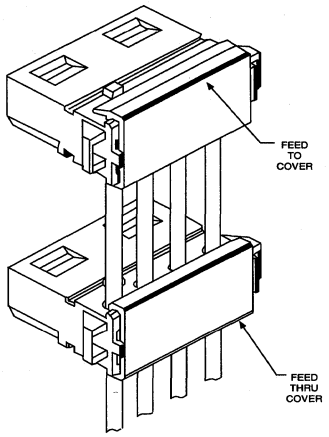
Voltage: 250V AC

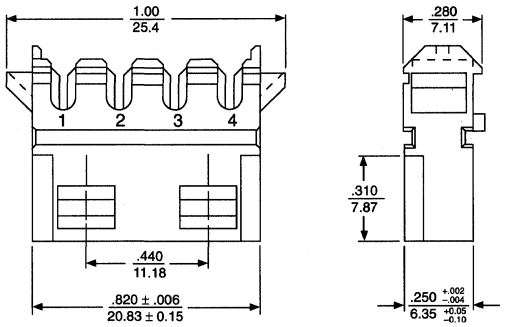
Current Rating: 16AWG: 8 amperes
18AWG: 8 amperes
20AWG: 6.5 amperes
22AWG: 6.0 amperes

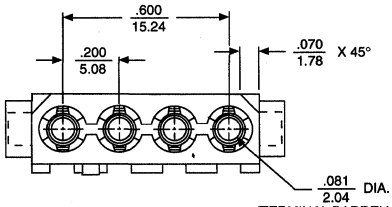
Contact Resistance: 20 milliohms max. initial

Insulation Resistance: 500 megohms

Dielectric Strength: 1500V AC







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Ordering Information
Kit with connector and wire strain relief 94V-0

Order No.	Cover Type	Wire Type	Color
• 15-24-3030	Feed thru	16 AWG Stranded	Yellow
• 15-24-3031	Feed to	16 AWG Stranded	Yellow
• 15-24-3032	Feed thru	18 AWG Stranded 20 AWG Solid and Fused	Red
• 15-24-3033	Feed to	18 AWG Stranded 20 AWG Solid and Fused	Red
• 15-24-3034	Feed thru	20 AWG Stranded	Blue
• 15-24-3035	Feed to	20 AWG Stranded	Blue
• 15-24-3036	Feed thru	22 AWG Solid, fused and stranded	Black
• 15-24-3037	Feed to	22 AWG Solid, fused and stranded	Black

Ordering Information
Kit with connector and wire strain relief 94V-2

Order No.	Cover Type	Wire Type	Color
• 15-24-3001	Feed thru	16 AWG Stranded	Yellow
• 15-24-3002	Feed to	16 AWG Stranded	Yellow
• 15-24-2003	Feed thru	18 AWG Stranded 20 AWG Solid and Fused	Red
• 15-24-2004	Feed to	18 AWG Stranded 20 AWG Solid and Fused	Red
• 15-24-2005	Feed thru	20 AWG Stranded	Blue
• 15-24-2006	Feed to	20 AWG Stranded	Blue
• 15-24-2007	Feed thru	22 AWG Solid, fused and stranded	Black
• 15-24-2008	Feed to	22 AWG Solid, fused and stranded	Black

Ordering Information
Connectors only 94V-0

Order No.	Wire Type	Color
• 15-24-3053	16 AWG Stranded	Yellow
• 15-24-3050	18 AWG Stranded 20 AWG Solid and Fused	Red
• 15-24-3051	20 AWG Stranded	Blue
• 15-24-3052	22 AWG Solid, fused and stranded	Black

Ordering Information
Connectors only 94V-2

Order No.	Wire Type	Color
• 15-24-3000	16 AWG Stranded	Yellow
• 15-24-2000	18 AWG Stranded 20 AWG Solid and Fused	Red
• 15-24-2001	20 AWG Stranded	Blue
• 15-24-2002	22 AWG Solid, fused and stranded	Black

Ordering Information
Strain relief covers only

Feed To	Feed Thru
• 15-05-7012	• 15-05-7011

Note: Covers must be used with connectors to retain wires
• U.S. Standard Product available through Molex franchised distributors.

Disk Drive Power Connection System, IDT Connectors

71156 Series
IDT Male Connector

- ☐ Wire-to-wire and wire-to-board insulation displacement
- ☐ End grips for easy unmating
- ☐ Housing detents provide positive retention
- ☐ Locking IDT wire strain relief cover
- ☐ Tooling: Hand and Arbor press
- ☐ UL Recognized File # E-29179
  CSA Certified File # LR19980

Mechanical:

Terminal: Phosphor bronze, tin plated

Housing: 94V-0 white thermoplastic

Electrical:

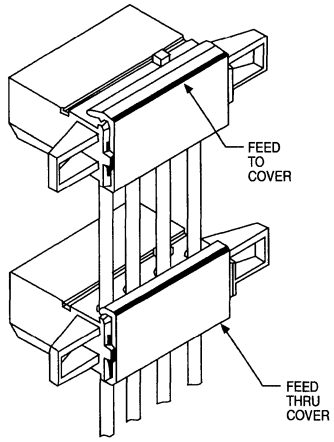
Voltage: 250V AC

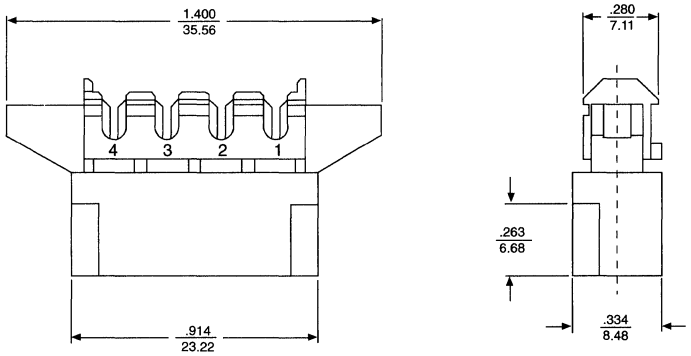
Current Rating: 16AWG: 8 amperes
18AWG: 8 amperes
20AWG: 6.5 amperes
22AWG: 6.0 amperes

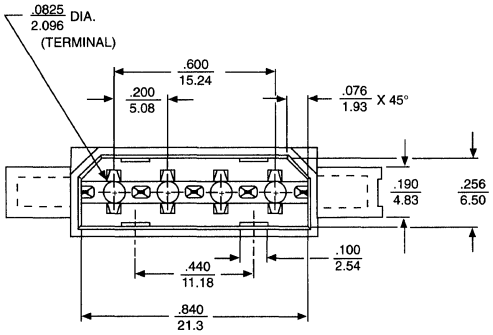
Contact Resistance: 20 milliohms max. initial

Insulation Resistance: 500 megohms

Dielectric Strength: 1500V AC







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Ordering Information
Kit with connector and wire strain relief

Order No.	Cover Type	Wire Type	Color
• 15-24-3040	Feed thru	16 AWG Stranded	Yellow
• 15-24-3041	Feed to	16 AWG Stranded	Yellow
• 15-24-3042	Feed thru	18 AWG Stranded 20 AWG Solid and Fused	Red
• 15-24-3043	Feed to	18 AWG Stranded 20 AWG Solid and Fused	Red
• 15-24-3044	Feed thru	20 AWG Stranded	Blue
• 15-24-3045	Feed to	20 AWG Stranded	Blue
• 15-24-3046	Feed thru	22 AWG Solid, fused and stranded	Black
• 15-24-3047	Feed to	22 AWG Solid, fused and stranded	Black

Ordering Information
Connectors only

Order No.	Wire Type	Color
• 15-24-3303	16 AWG Stranded	Yellow
• 15-24-3300	18 AWG Stranded 20 AWG Solid and Fused	Red
• 15-24-3301	20 AWG Stranded	Blue
• 15-24-3302	22 AWG Solid, fused and stranded	Black

Ordering Information
Strain relief covers only

Feed To	Feed Thru
• 15-05-7012	• 15-05-7011

Note: Covers must be used with connectors to retain wires
• U.S. Standard Product available through Molex franchised distributors.

Industry Standard Power Supply Header

8619 Series

- .156" (3,96mm) pitch
- 6 and 12 circuit
- Break-away polarizing keys
- Rectangular pins .031" x .062" (0,79 x 1,57mm)
- Mates with 90331 Power Connector

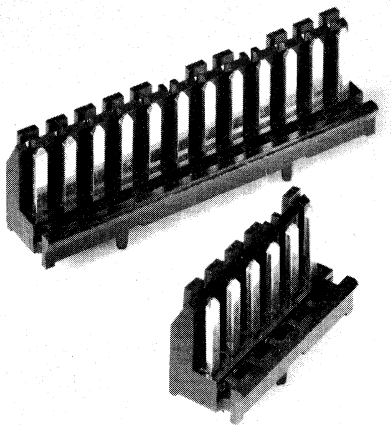
SPECIFICATIONS:

Terminal Material:
Tin plated copper alloy

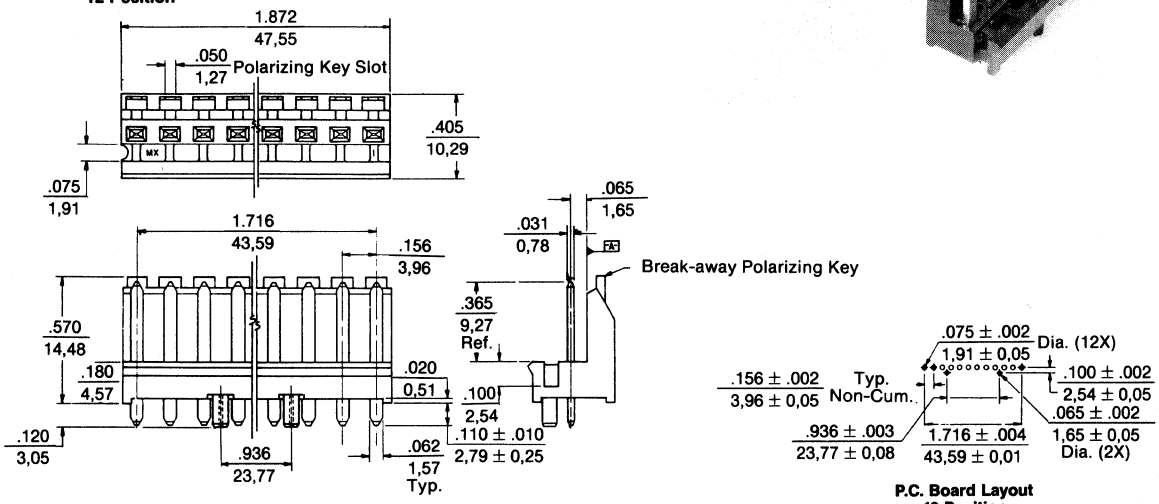
Insulator Material:
Glass filled polyester
UL 94V-0, black

Current Rating:
5 amp (max.)

Voltage Rating:
250V AC



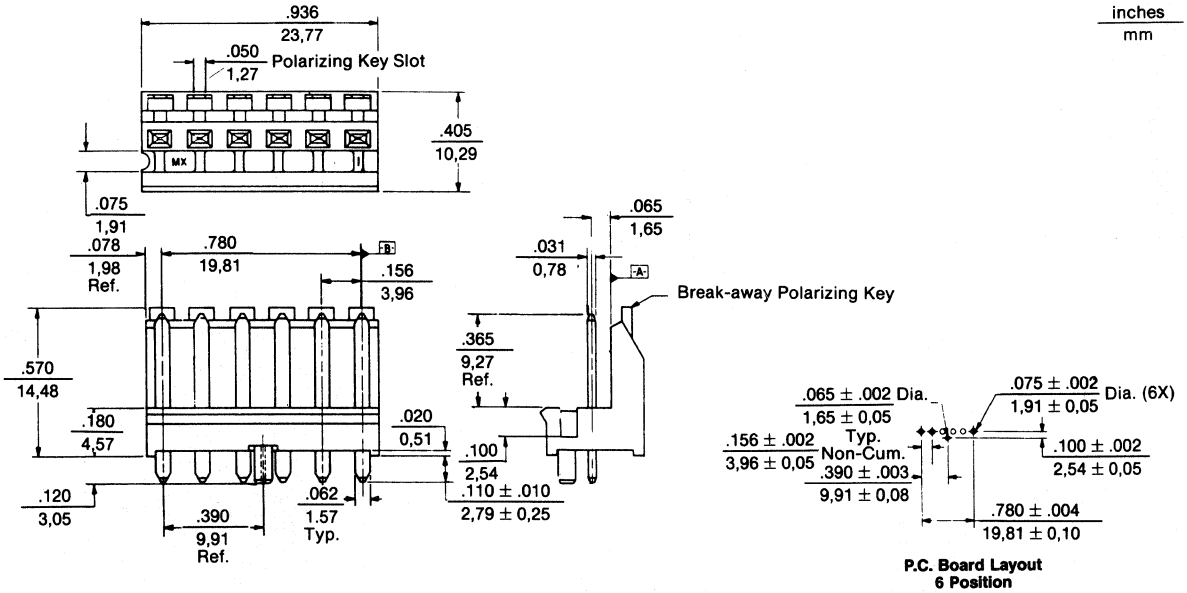
12 Position



P.C. Board Layout
12 Position

6 Position

inches
mm



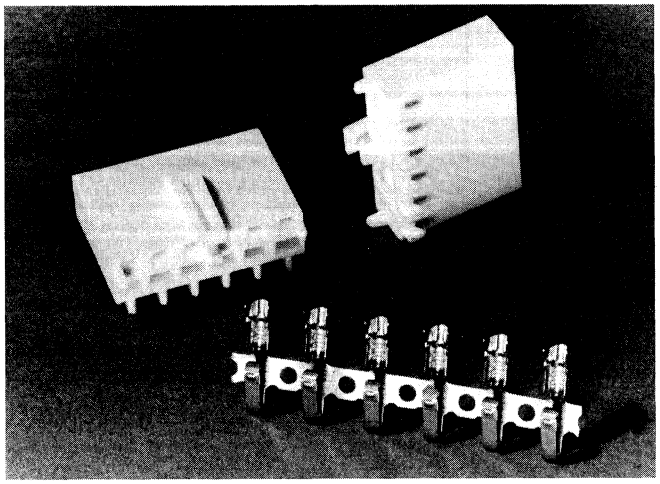
P.C. Board Layout
6 Position

Ordering Information

Circuits	Eng. No.	Order No.
6	8619-0602	15-48-0406
12	8619-1202	15-48-0212

Industry Standard Power Supply Connector

90331 Series
Housing
8993 Series
Crimp Terminal



- .156 (3,96mm) pitch
- 6 circuit standard
- Molded latches lock on header
- Polarizing ribs
- Keying options
- Friction lock
- Mates with 8619 header
- Accepts crimp terminal 8993

SPECIFICATION

Housing Material:
Polyester UL 94V-0, white

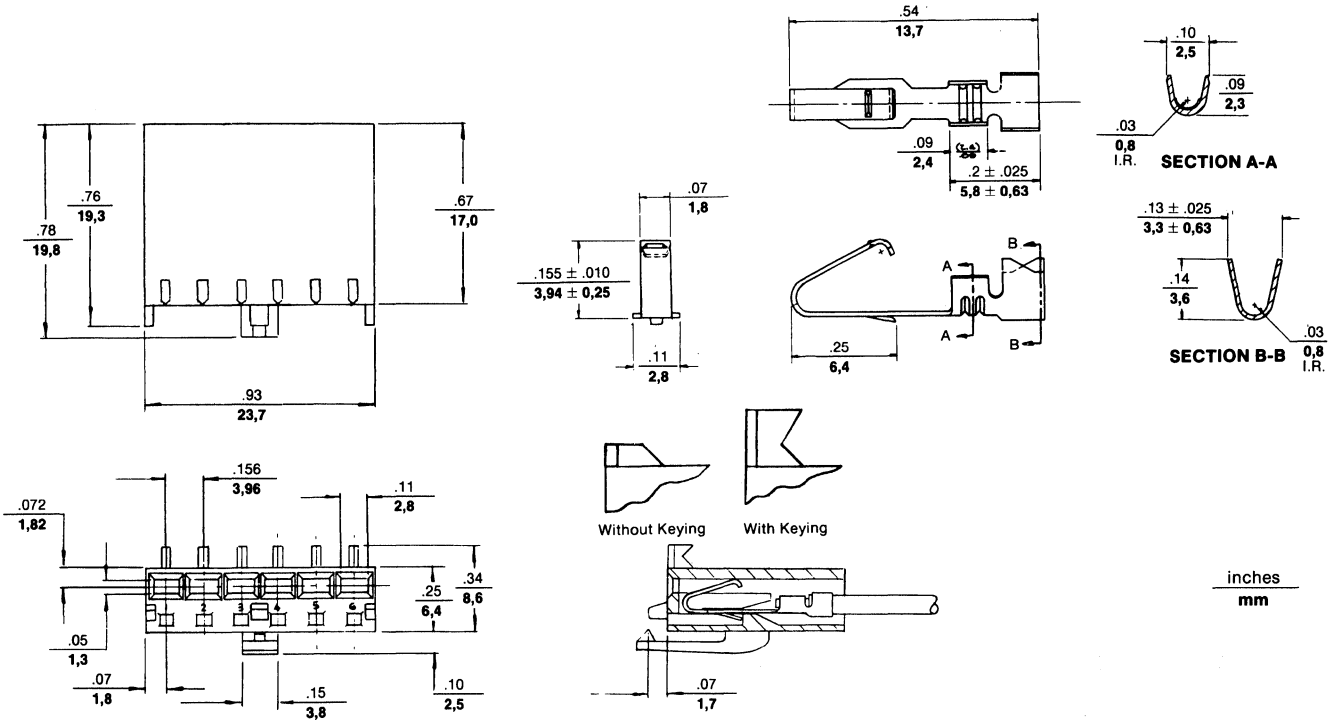
Terminal Material:
Copper alloy, tin plated

Wire Range:
AWG 18-24

Insulation Diameter:
.110" (2.79mm) max.

Current Rating:
5 amp max.

Voltage Rating:
250V AC



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Ordering Information

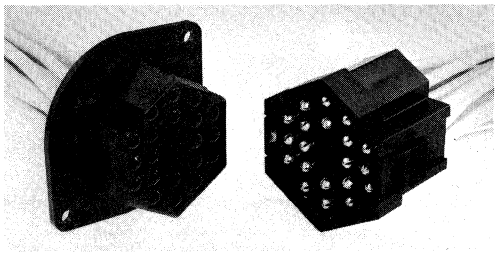
	HOUSING					
	Keying at Circuit Positions					
Order Number	1	2	3	4	5	6
90331-0001	Yes	Yes	Yes	Yes	Yes	Yes
90331-0002	Yes	No	No	No	No	No
90331-0003	No	No	No	Yes	No	No

TERMINAL		
	Eng. No.	Order No.
Chain Form	8993-P914	08-50-0277
Loose	8993-P914L	08-50-0276

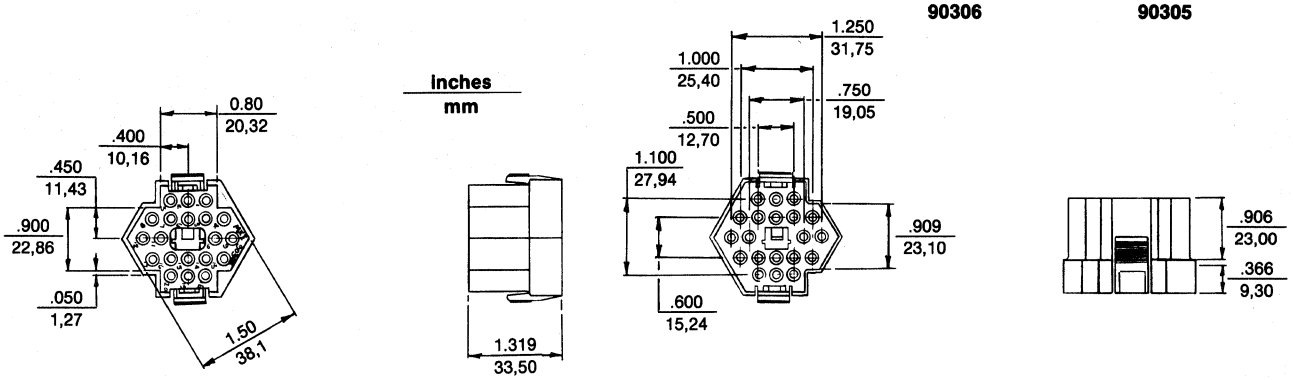
21 Position Pin & Socket Housings for Harsh Environments

90305 Pin Housing

- Accepts twenty Molok pin contacts; order separately
- Also accepts 9,5mm tab contact
- Nylon 6/6, UL 94V-2, black
- Assembled housing mates with 90306 socket assembly



90306 90305

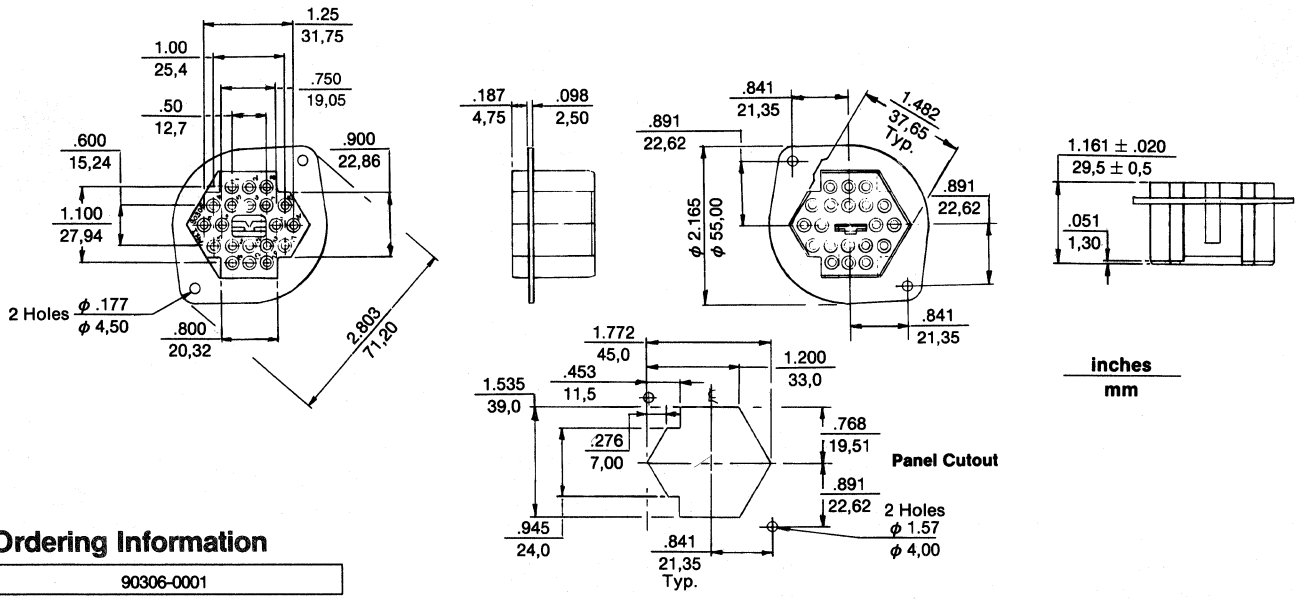


Ordering Information

90305-0001

90306 Socket Housing

- Accepts twenty Molok socket contacts; order separately
- Also accepts 9,5mm receptacle contact
- Nylon 6/6, UL 94V-2, black
- Assembled housing mates with 90305 pin assembly
- Panel mount



Ordering Information

90306-0001

Terminals for Multi-Contact Connector Housings

Technical Data

Product Description	Fits Tab Size	Push On Force (Per Contact)	Pull Off Force	Contact Retention Force	Current Rating	Cycles	Reel Quantity	Wire Range	Pin Diameter
90020	2,8 x 0,8 mm 2,0 x 0,8 mm	10 N max.	4 N max.	60 N min.	8A	50 min	4,000	0,5-1,5 and 1,0-2,5 mm²	
90026 **90027**		20 N max.	12 N max.	60 N min.	25A	50 max.	3,000	1,0-2,5 and 2,5-4,0 mm²	3,55 mm
90021	6,3 x 0,8 mm	18 N max. phos. bronze 8 N max. brass	4 N min.	60 N min.	16A	50	3,000	0,5-1,5 and 1,0-2,5 mm²	
90028	6,2 x 0,8 mm with locking hole	25 N max.	25 N max.	40 N min.	25A		2,000	0,5-1,5 and 1,0-2,5 and 2,5-4,0 mm²	
90022 **90024**		6 N max.	1 N min.	60 N min.	13A	200 tin 500 gold	3,000	0,5-1,5 and 1,0-2,5 mm²	1,58 mm
90030	2,8-0,8 and 2,0-0,8 mm	10 N max.	4 N max.	60 N min.	8A	50 min.	4,000	N/A	

NOTES:
Terminals accommodate standard and thin wall cable.
Current ratings based on +105°C max. operating temperature.

Material and plating specifications shown with ordering information on each product page.
Cable tensile from crimp as per DIN 46249, all products.

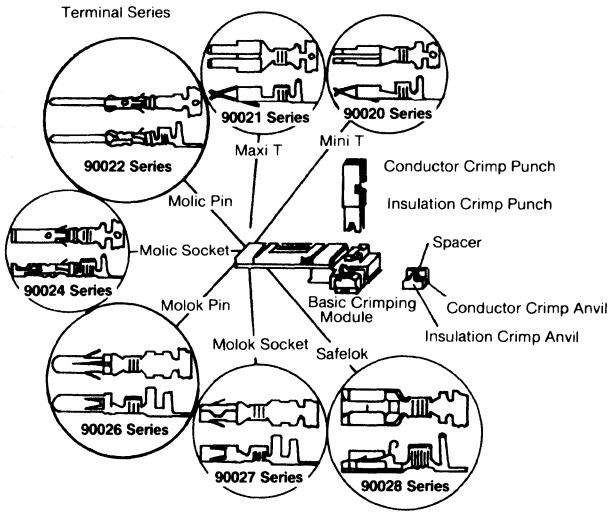
Crimp Tooling Information

Molex provides a flexible tolling system which can easily be adapted to manufacture double-ended harnesses of different lengths and wire tyles with different terminals.

By changing small die parts on the Molex TM 40/42, a range of popular terminals can be accommodated.

TM 40/42s can be mounted in pairs onto the Komax brand fully automated, double-ended harness assembly machines to achieve 15,000 crimps per hour.

TM 40/42 Crimp Die System
Front Carrier Chain Type Terminals Only



Basic Terminator Order No. 69001-0000 without Tooling

Terminal Part No.	Terminator with Tool Kit	Spare Tool Kit
90020-01 90020-02 90020-03 90020-04	69001-1000 69001-1005 69001-1001 69001-1006	69001-2001 69001-2002 69001-2003 69001-2004
90021-01 90021-02 90021-03 90021-04	69001-1000 69001-1005 69001-1001	69001-2001 69001-2002 69001-2003
90022-01 90022-02 90022-03 90022-04	69001-1010 69001-1011 69001-1012 69001-1013	69001-2005 69001-2006 69001-2007 69001-2008
90024-01 90024-02 90024-03 90024-04	69001-1010 69001-1011 69001-1012	69001-2005 69001-2006 69001-2007
90028-01 90028-02 90028-03 90028-04 90028-05 90028-06	69001-1002 69001-1007 69001-1004 69001-1008 69001-1003 69001-1009	69001-2013 69001-2014 69001-2015 69001-2016 69001-2017 69001-2018

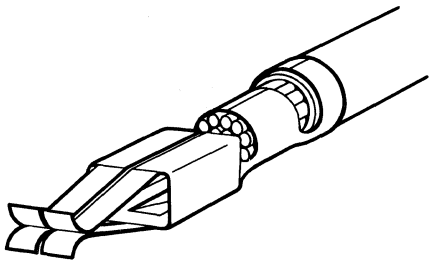
Terminal Part No.	Terminator with Tool Kit	Spare Tool Kit
90026-01 90026-02 90026-03 90026-04	69001-1014 69001-1015 69001-1016 69001-1017	69001-2009 69001-2010 69001-2011 69001-2012
90027-01 90027-02 90027-03 90027-04	69001-1014 69001-1015 69001-1016 69001-1017	69001-2009 69001-2010 69001-2011 69001-2012

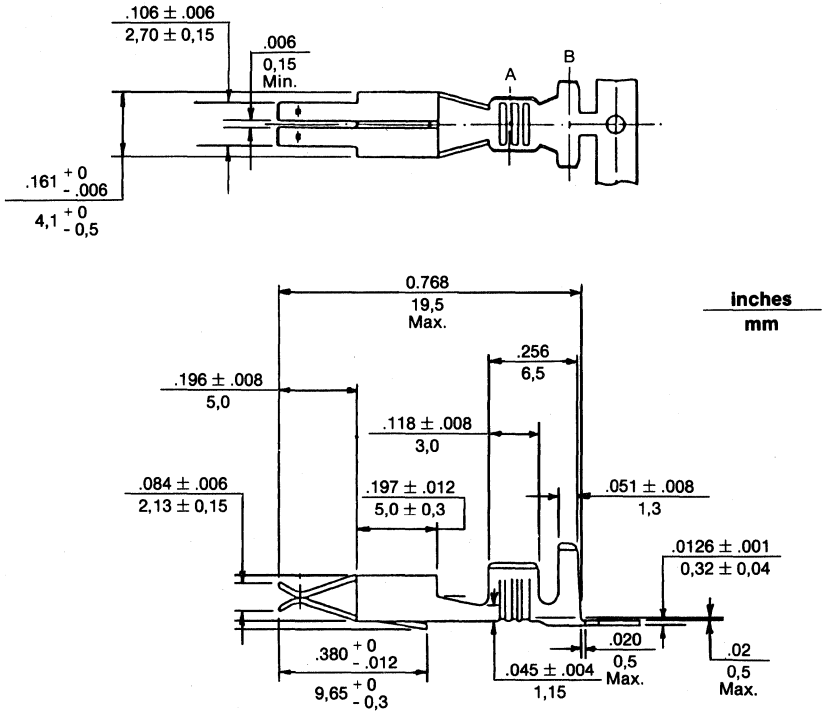
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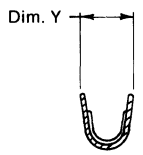
Standard Terminal for use with Multi-Contact Connector Housings

90020 Mini-T Terminal

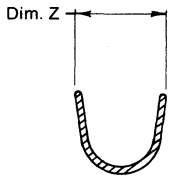
- For input/output "black boxes" in cars and appliances
- Four independent contact springs
- High resistance to vibration
- Low engagement force
- Can be applied on fully automatic equipment
- High current carrying capacity







Section A-A



Section B-B

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Ordering Information 90020 - Mini-T

Wire Range mm²	Ins. Range ϕ mm	Material - (Plating) 0,32mm Brass (Hot Tin Dipped[1])	0,32mm Phos. Bronze (Hot Tin Dipped[1])
0,5-1,5	2,0-3,3	90020-0101	90020-0102
	1,4-2,3	90020-0201	90020-0202
1,0-2,5	2,7-4,3	90020-0301	90020-0302
	1,0-2,9	90020-0401	90020-0402

[1] 1-2,5 microns thick

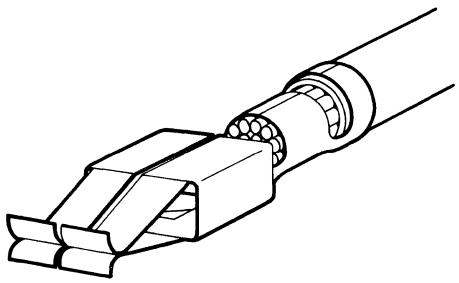
Dimensional Information 90020

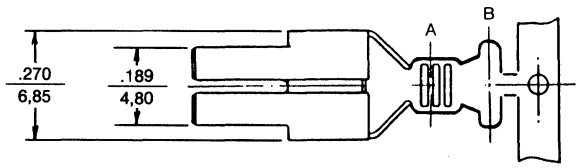
Wire Range mm²	Ins. Range ϕ mm	Dim. Z	Dim. Y	Wire Range mm²	Ins. Range ϕ mm	Dim. Z	Dim. Y
0,5-1,5	2,0-3,3	.157 4,0	.117 3,0	1,0-2,5	2,7-4,3	.189 4,8	.137 3,5
	1,4-2,3	.142 3,6	.117 3,0		1,8-2,9	.169 4,3	.137 3,5

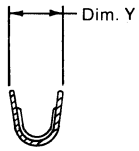
Standard Terminal for Harsh Environments

90021 Maxi-T Terminal

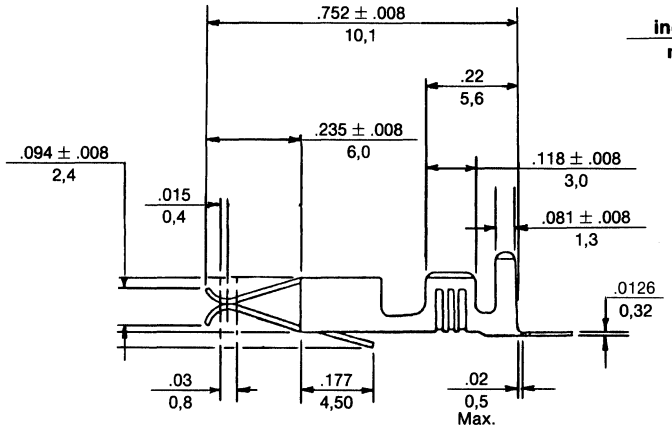
- Four independent contact springs
- High resistance to vibration
- Low engagement force
- Can be applied on fully automatic equipment
- High current carrying capacity

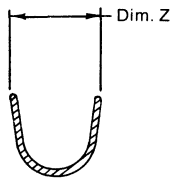






Section A-A





Section B-B

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Ordering Information

Wire Range mm²	Ins. Range ϕ mm	Material - (Plating)		
		0,32mm Brass (Hot Tin Dipped[1])	0,32mm Phos. Bronze (Hot Tin Dipped[1])	Copper/Iron
0,5-1,5	2,0-3,3	90021-0101	90021-0102	90021-0104
	1,4-2,3	90021-0201	90021-0202	90021-0204
1,0-2,5	2,7-4,3	90021-0301	90021-0302	90021-0304
	1,0-2,9	90021-0401	90021-0402	90021-0404

[1] 1-2,5 microns thick

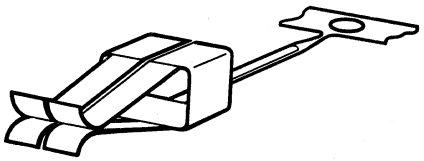
Dimensions

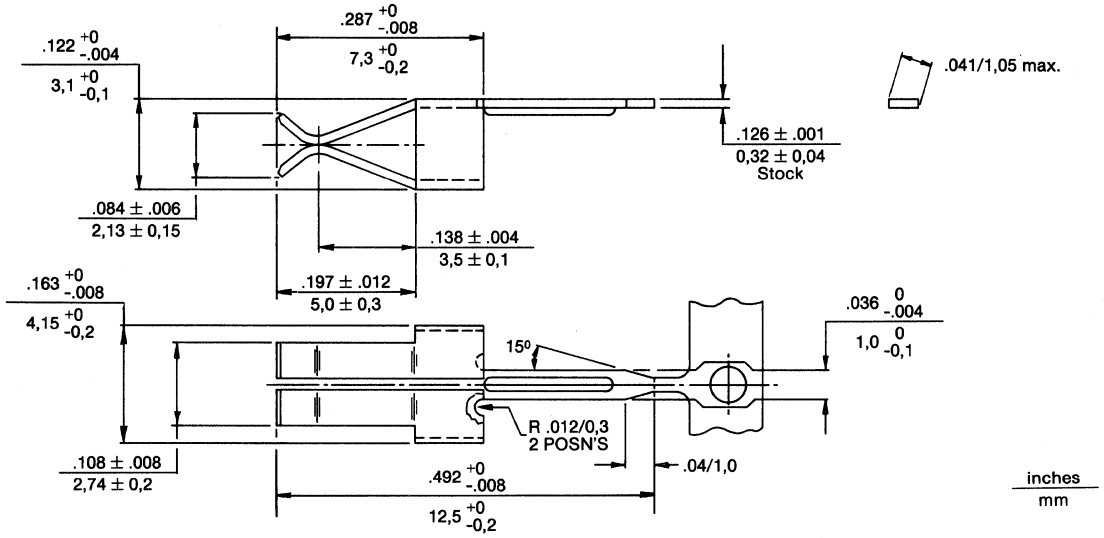
Wire Range mm²	Ins. Range ϕ mm	Dim. Z	Dim. Y	Wire Range mm²	Ins. Range ϕ mm	Dim. Z	Dim. Y
0,5-1,5	2,0-3,3	.157 4,0	.117 3,0	1,0-2,5	2,7-4,3	.189 4,8	.137 3,5
	1,4-2,3	.142 3,6	.117 3,0		1,8-2,9	.169 4,3	.137 3,5

Standard Terminal with Solder Post

90030 Mini T Terminal

- For direct insertion into printed circuit board
- Tulip shaped mouth for easy front entry
- Four independent contact springs
- High resistance to vibration
- Low engagement force
- High current carrying capacity
- Phosphor bronze terminal, hot tin dip plate





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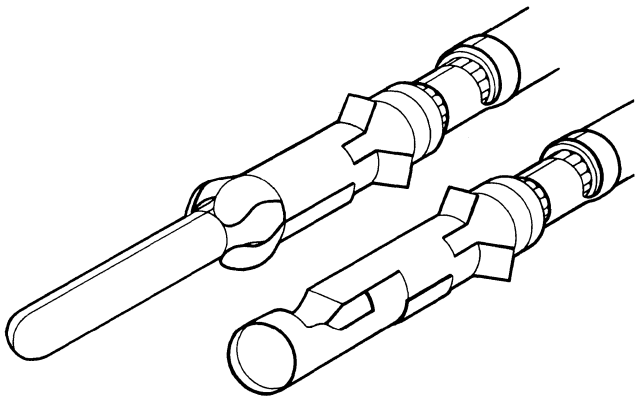
Ordering Information

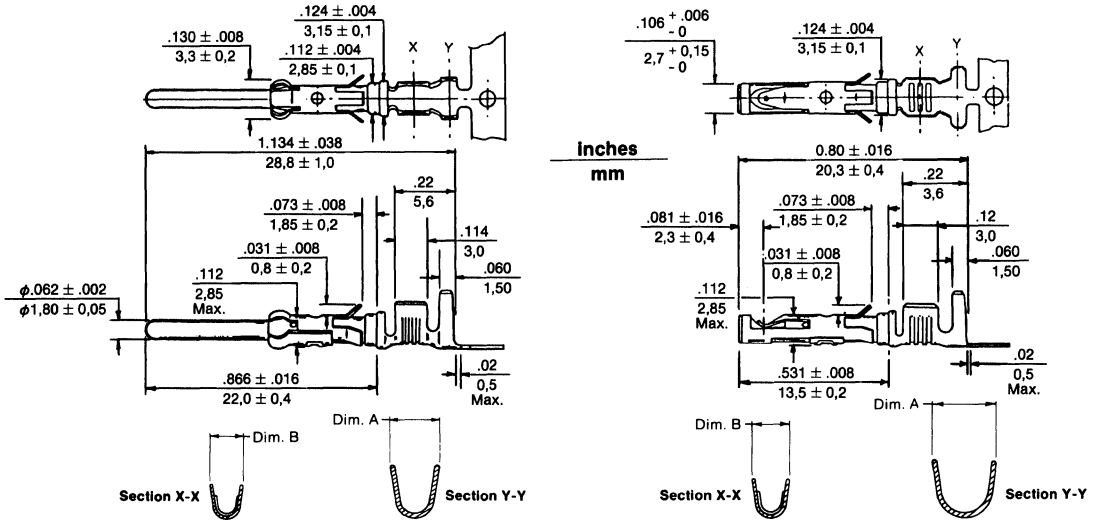
Order No.	
Chain Form	**Loose Form**
90030-0001	90030-1001

Standard Contacts for High Density Multi-Contact Connector Housings

90022 Molic Pin and 90024 Molic Socket

- Current rating 13 amps
- Bell shaped easy entry socket front
- Large wiping length area
- Self-locking
- Independent separate contact springs
- Can be used on fully automatic application tooling
- Can be supplied on reels for large production series
- Can be used in multi-contact applications
- Stabilized three point locking in connector housing
- Separate steel contact spring on the female socket





Ordering Information 90022 - Molic Pin

Wire Range mm²	Ins. Range ϕ mm	Material - (Plating)	
		0,32mm Brass (Pre-Tinned[1])	0,32mm Phos. Bronze (Pre-Tinned[1])
0,5-1,5	2,0-3,0	90022-0101	90022-0102
	1,3-2,3	90022-0201	90022-0202
	2,4-3,7	90022-0501	90022-0502
1,0-2,5	2,4-3,7	90022-0301	90022-0302
	1,7-2,9	90022-0401	90022-0402

[1] 1-2,5 microns thick

Ordering Information 90024 - Molic Socket

Wire Range mm²	Ins. Range ϕ mm	Material - (Plating)	
		0,32mm Brass (Pre-Tinned[1])	0,32mm Phos. Bronze (Pre-Tinned[1])
0,5-1,5	2,0-3,0	90024-0101	90024-0102
	1,3-2,3	90024-0201	90024-0202
	2,4-3,7	90024-0501	90024-0502
1,0-2,5	2,4-3,7	90024-0301	90024-0302
	1,7-2,9	90024-0401	90024-0402

[1] 1-2,5 microns thick

Dimensions

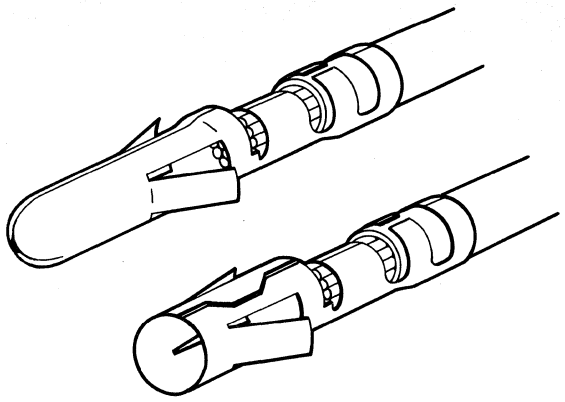
Wire Range mm²	Ins. Range ϕ mm	Dim. A	Dim. B	Wire Range mm²	Ins. Range ≥ mm	Dim. A	Dim. B
0,5-1,5	2,0-3,0	.157 4,0	.117 3,0	1,0-2,5	2,4-3,7	.189 4,8	.137 3,5
	1,3-2,3	.142 3,6	.117 3,0		1,7-2,9	.169 4,3	.137 3,5
	2,4-3,7	.189 4,0	.117 3,0				

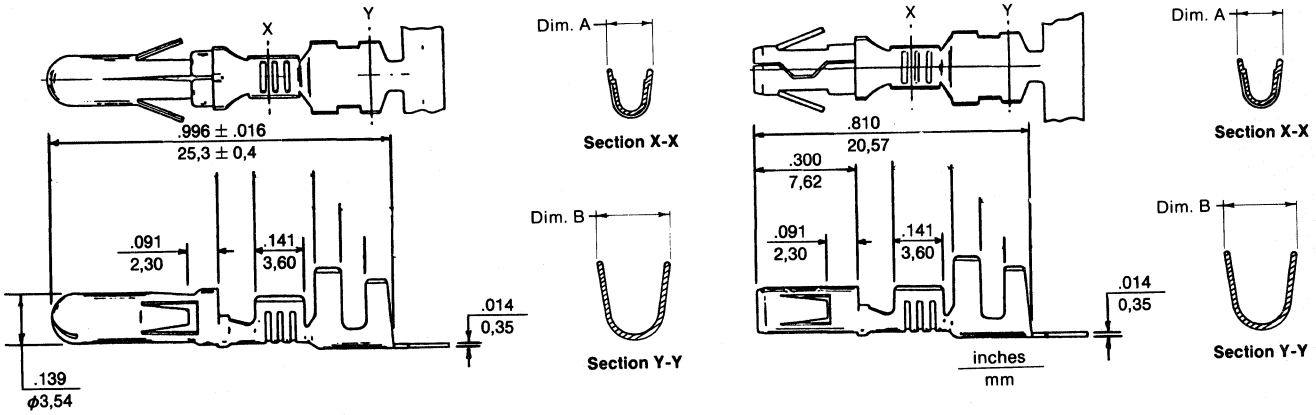
K

Standard Contacts for High Current Applications

90026 Molok Pin and 90027 Molok Socket

- ☐ Current rating 25 amps
- ☐ Two stabilized locking lances, self-locking
- ☐ Easy engagement/disengagement designed for multicontact connectors
- ☐ Robust construction
- ☐ High density application possible
- ☐ Double wire crimps possible
- ☐ The Molex system is recommended for a centerline grid of 6,0 mm
- ☐ Socket with S-shaped forming joints
- ☐ Front end of socket slightly conical to facilitate entry into contact housing





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Ordering Information 90026 - Molok Pin

Wire Range mm²	Ins. Range ϕ mm	Material - (Plating)	
		0,35mm Brass (Hot Tin Dip[1])	0,35mm Phos. Bronze (Hot Tin Dip[1])
1,0-2,5	2,4-3,7	90026-0101	90026-0102
	1,7-2,9	90026-0201	90026-0202
2,5-4,0	3,3-4,5	90026-0301	90026-0302
	2,6-3,6	90026-0401	90026-0402

[1] 1-2,5 microns thick

Ordering Information 90027 - Molok Socket

Wire Range mm²	Ins. Range ϕ mm	Material - (Plating)	
		0,35mm Brass (Hot Tin Dip[1])	0,35mm Phos. Bronze (Hot Tin Dip[1])
1,0-2,5	2,4-3,7	90027-0101	90027-0102
	1,7-2,9	90027-0201	90027-0202
2,5-4,0	3,3-4,5	90027-0301	90027-0302
	2,6-3,6	90027-0401	90027-0402

[1] 1-2,5 microns thick

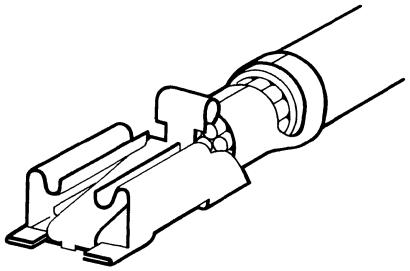
Dimensions

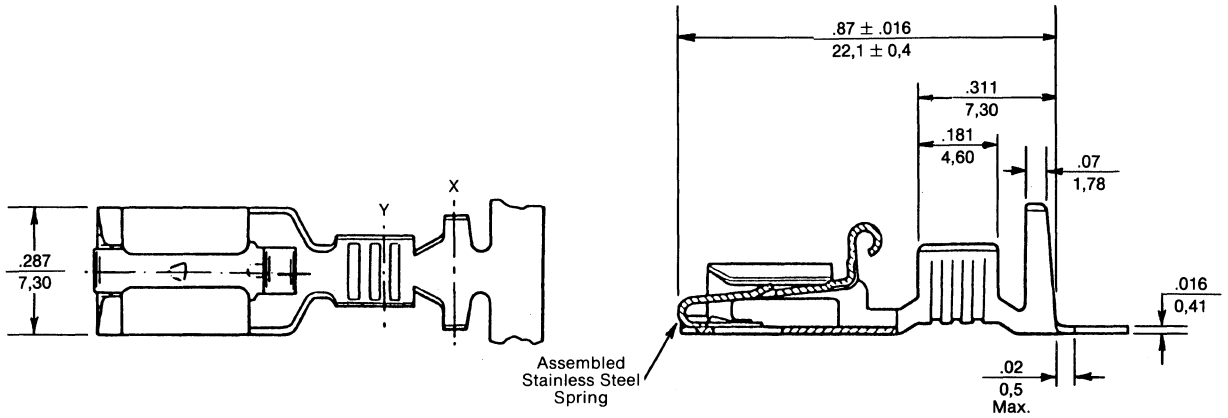
Wire Range mm²	Ins. Range ϕ mm	Dim. A	Dim. B	Wire Range mm²	Ins. Range ϕ mm	Dim. A	Dim. B
1,0-2,5	2,4-3,7	.14 3,55	.20 5,0	2,5-4,0	3,3-4,5	.17 4,35	.23 5,8
	1,7-2,9	.14 3,55	.20 4,4		2,6-3,6	.17 4,35	.21 5,3

Push-On Terminal for High Current Applications

90028
Safelok

- Current rating 25 amps
- Very low engagement/ disengagement forces
- Preassembled stainless steel spring which cannot corrode
- Locking dimple on spring positive locks into the tab hole
- Constant locking due to steel spring
- High current carrying capacity
- Can be applied on fully automatic equipment
- Can be used in multi-contact configuration
- Terminals can be locked into contact housings
- Fits with flat-type tab, 6,2 x 0,8mm (.244" x .031") with hole





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Ordering Information 90028

Wire Range mm²	Ins. Range ϕ mm	Material - (Plating)			
		0,40mm Brass (Hot Tin Dip[1])	0,40mm Phos. Bronze (Hot Tin Dip[1])	0,40mmBrass (Unplated)	0,40mm Phos. Bronze (Unplated)
0,5-1,5	2,0-3,0	90028-0101	90028-0102	90028-0103	90028-0104
	1,3-2,3	90028-0201	90028-0202	90028-0203	90028-0204
1,0-2,5	2,4-3,7	90028-0301	90028-0302	90028-0303	90028-0304
	1,7-2,9	90028-0401	90028-0402	90028-0403	90028-0404
2,5-4,0	3,3-4,5	90028-0501	90028-0502	90028-0503	90028-0504
	2,6-3,6	90028-0601	90028-0602	90028-0603	90028-0604

[1] 1-2,5 μm thick

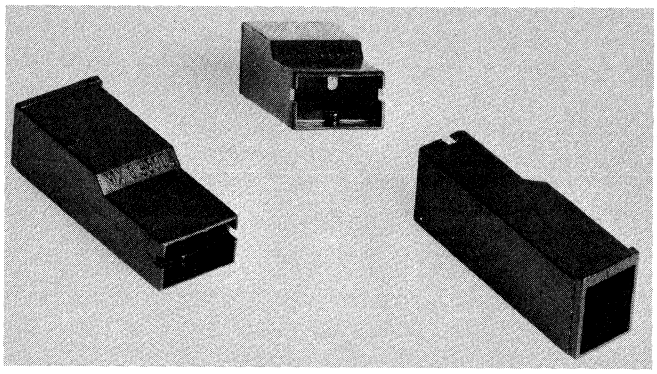
Dimensions

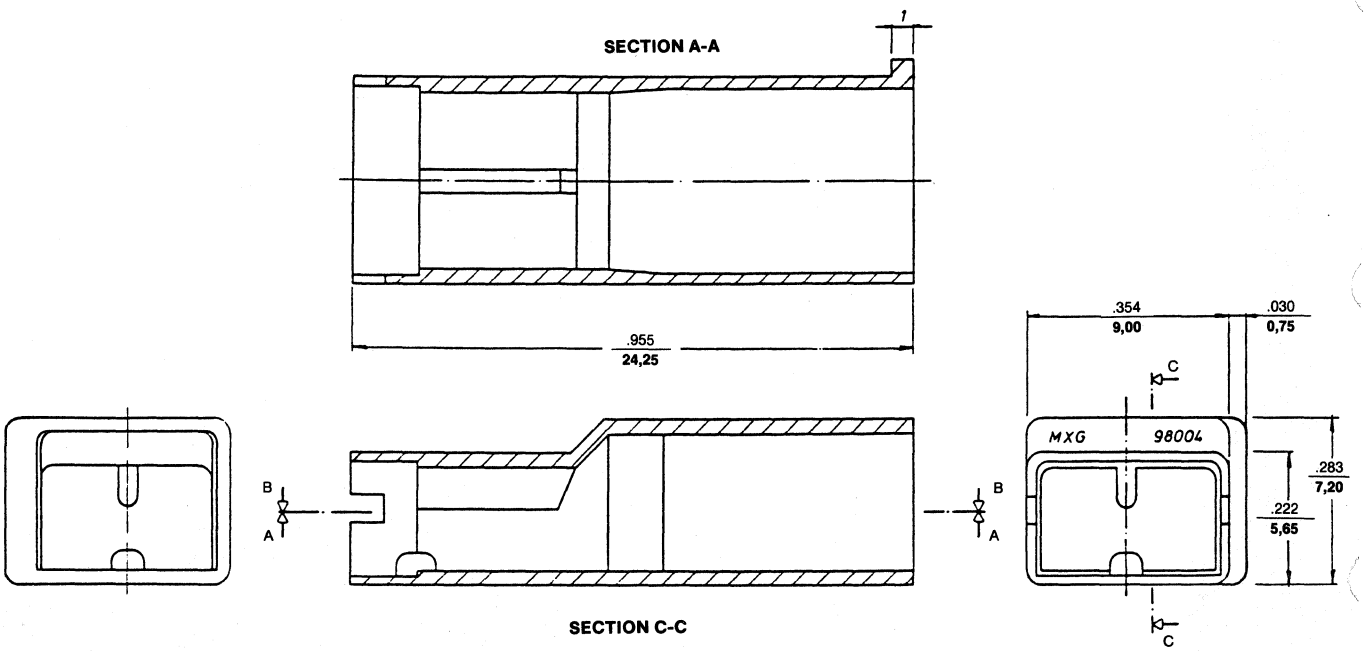
Wire Range mm²	Ins. Range ϕ mm	Dim. A	Dim. B	Wire Range mm²	Ins. Range ϕ mm	Dim. A	Dim. B
0,5-1,5	2,0-3,0	.12 3,0	.17 4,4	2,5-4,0	3,3-4,5	.17 4,4	.23 6,0
	1,3-2,3	.12 3,0	.145 3,7		2,6-3,6	.17 4,4	.21 5,4
1,0-2,5	2,4-3,7	.14 3,6	.20 5,1				
	1,7-2,9	.14 3,6	.17 4,5				

Safelok™ Housing

98004

- 1 circuit
- Accepts Safelok Terminal 90028
- Housing: nylon, 94V-2





inches
mm

K

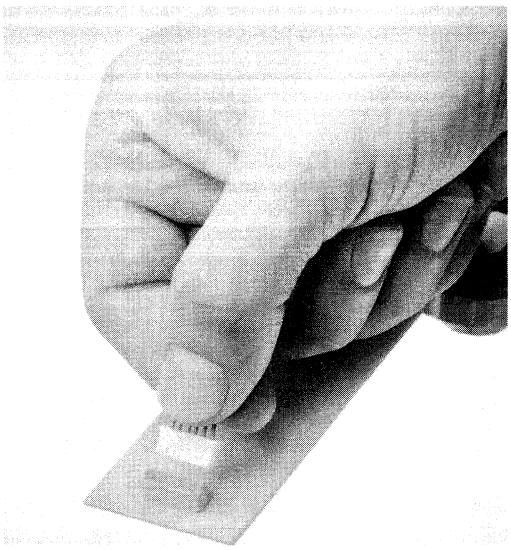
Ordering Information

Order No.	Color
98004-0101	Black
98004-0102	Natural

Highlighted area denotes Molex European standard product, usually available within shorter leadtimes.

Micro Connectors

Contents



Board-to-Board Connectors
0.8mm .031" 2L-4L
1.0mm .039" 5L-6L
1.25mm .049" 7L-10L
Hinged 8L
.050" 1.27mm Center EBBI 50-D 11L
D-50L .050" 1.27mm 12L-15L
1.5mm .059" 16L-17L
2.0mm .079" 18L-26L
Floating Bottom Entry System 24L-25L
Floating System 26L
Embossed Tape Packaging of SMT Connectors 27L

FFC/FPC Connectors
0.5mm .020" FPC Connectors 28L-29L
0.625mm .024" FPC Connectors 30L-32L
1.0mm .039" FFC/FPC Connectors 33L-38L
1.25mm .049" FFC/FPC Connectors 39L-41L

Wire Traps
1.5mm .059" Center Wire Trap 43L-44L
2.0mm .079" Center Wire Trap 48L-49L

Jumper Sockets and Ribbon Cable Connectors
1.5mm .059" 45L-47L
2.0mm .079" Jumper Socket 50L-51L
2.0mm .079" Ribbon Cable Holder 52L-53L

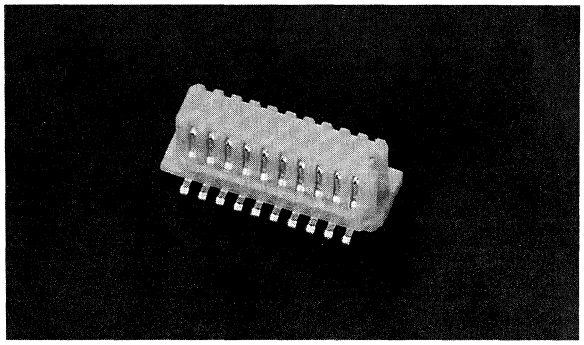
Wire-to-Board Connectors
1.25mm .049" Wire-to-Board System 54L-56L
1.25mm .049" Board-In Connector 57L
2.0mm .079" Wire-to-Board System 58L-62L
2.0mm .079" Board-In Connector 63L-64L
2.0mm .079" Mi II SYSTEM Wire-to-Board Connectors 65L-69L

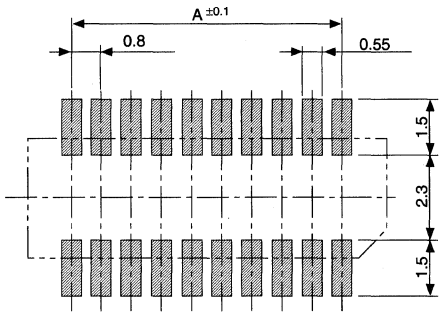
Wire-to-Wire Connectors
1.25mm .049" Wire-to-Wire System 70L
2.0mm .079" Wire-to-Wire System 71L
2.0mm .079" Milli-Grid Connector System 72L-85L

0.8mm .031" Center Board-to-Board System

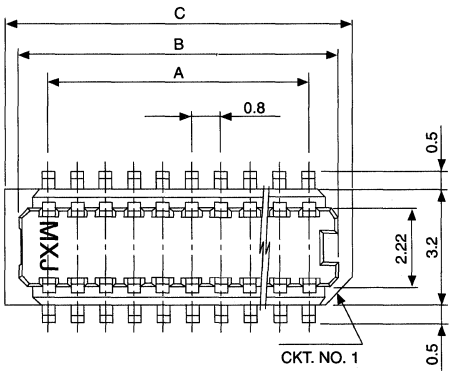
52465 Series
Dual Row
Surface Mount Receptacle

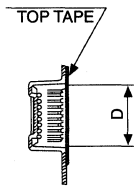
- PPA, UL 94V-0
- Tin plated phosphor bronze terminals
- 10-30 circuits
- Available in reel form only
- Mates with 53307, 53309

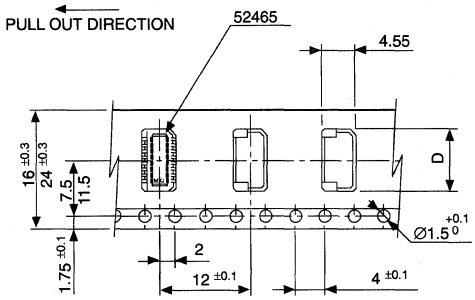




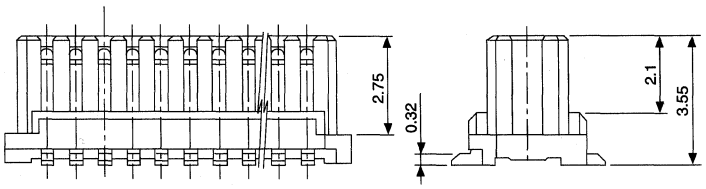
PCB LAYOUT

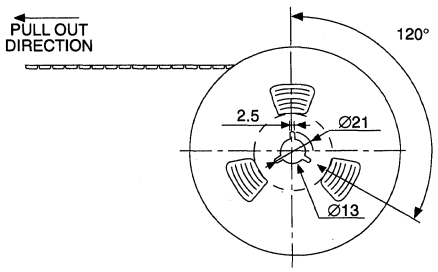


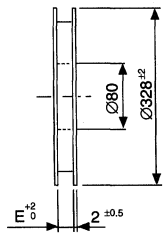




ACCUMULATIVE PITCH 40 ±0.2







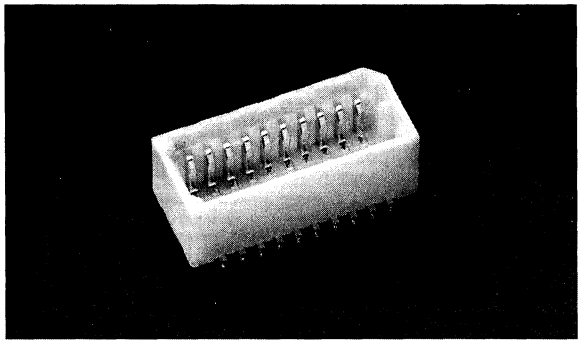
Ordering Information and Dimensions in mm

mm

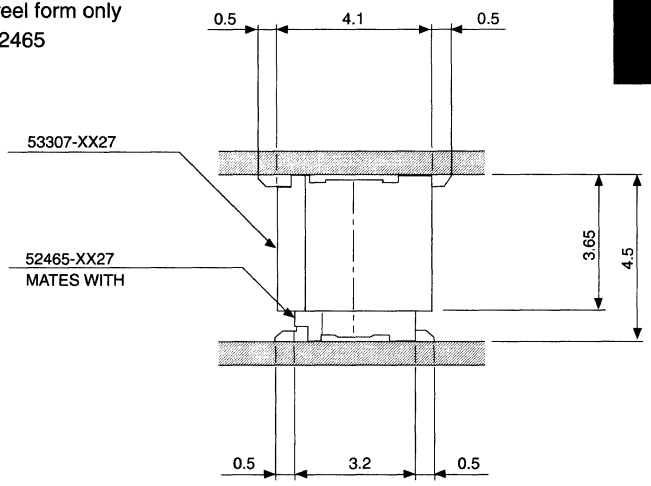
Circuits	Order No.	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Tape Width
10	52465-1091	3.2	4.85	5.6	5.9	16.4	16
12	52465-1291	4.0	5.65	6.4	6.7	16.4	16
14	52465-1491	4.8	6.45	7.2	7.5	16.4	16
16	52465-1691	5.6	7.25	8.0	8.3	16.4	16
18	52465-1891	6.4	8.05	8.8	9.1	16.4	16
20	52465-2091	7.2	8.85	9.6	9.9	24.4	24
22	52465-2291	8.0	9.65	10.4	10.7	24.4	24
24	52465-2491	8.8	10.45	11.2	11.5	24.4	24
26	52465-2691	9.6	11.25	12.0	12.3	24.4	24
28	52465-2891	10.4	12.05	12.8	13.1	24.4	24
30	52465-3091	11.2	12.85	13.6	13.9	24.4	24

0.8mm .031" Center Board-to-Board System

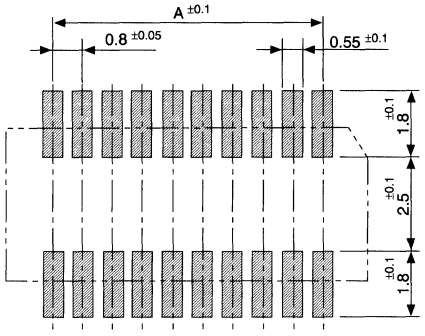
53307 Series
Dual Row
Surface Mount Straight Header



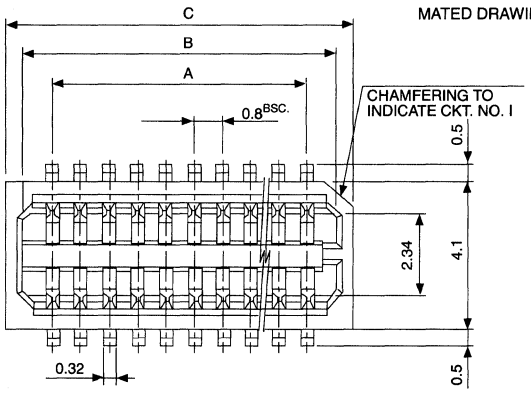
- PPS, UL 94V-0
- Tin plated phosphor bronze pins
- 12-30 circuits
- Available in reel form only
- Mates with 52465

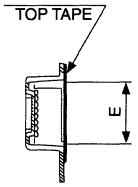


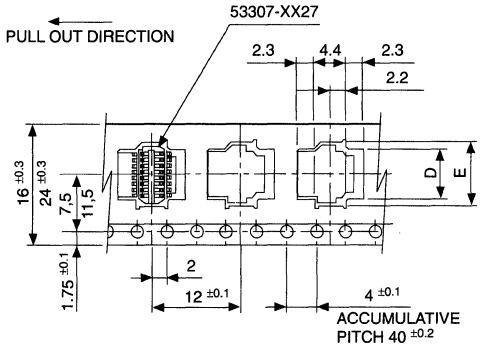
MATED DRAWING (REF.)

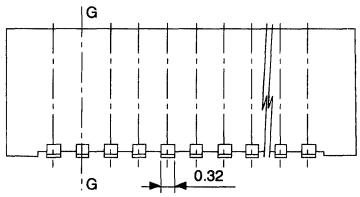


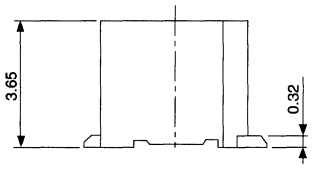
PCB LAYOUT

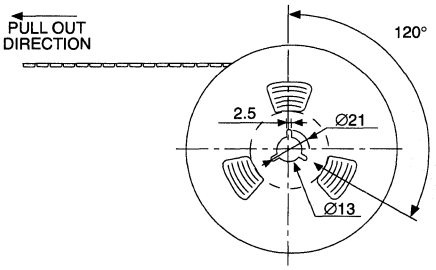


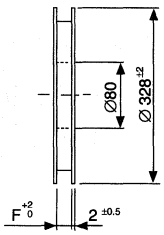












Ordering Information and Dimensions in mm

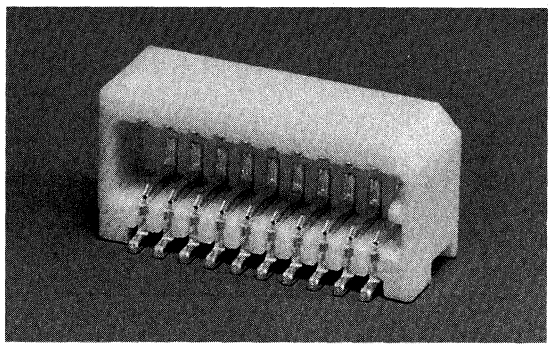
mm

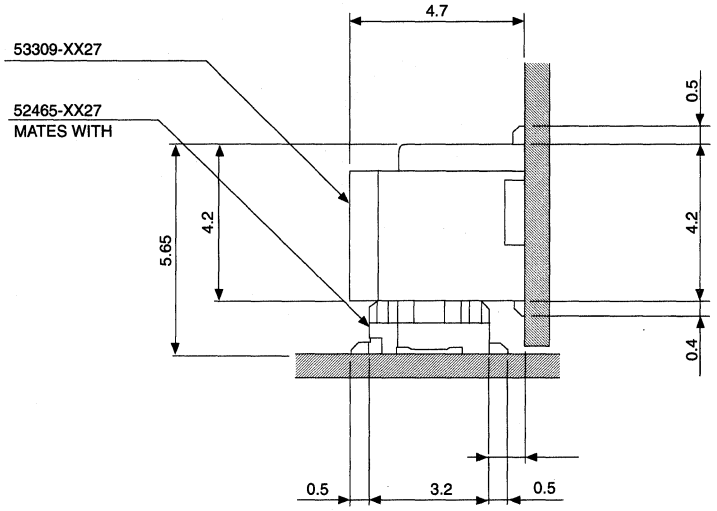
Circuits	Order No.	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Tape Width
12	53307-1291	4.0	5.7	6.6	5.1	6.9	16.4	16
14	53307-1491	4.8	6.5	7.4	5.9	7.7	16.4	16
16	53307-1691	5.6	7.3	8.2	6.7	8.5	16.4	16
18	53307-1891	6.4	8.1	9.0	7.5	9.3	16.4	16
20	53307-2091	7.2	8.9	9.8	8.3	10.1	24.4	24
22	55307-2291	8.0	9.7	10.6	9.1	10.9	24.4	24
24	53307-2491	8.8	10.5	11.4	9.9	11.7	24.4	24
26	53307-2691	9.6	11.3	12.2	10.7	12.5	24.4	24
28	53307-2891	10.4	12.1	13.0	11.5	13.3	24.4	24
30	53307-3091	11.2	12.9	13.8	12.3	14.1	24.4	24

0.8mm .031" Center Board-to-Board System

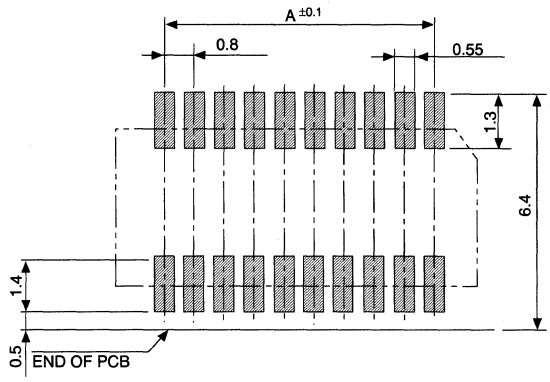
53309 Series
Surface Mount Right Angle Header

- PPS, UL 94V-0
- Tin plated phosphor bronze pins
- 10-30 circuits
- Available in reel form only
- Mates with 52465

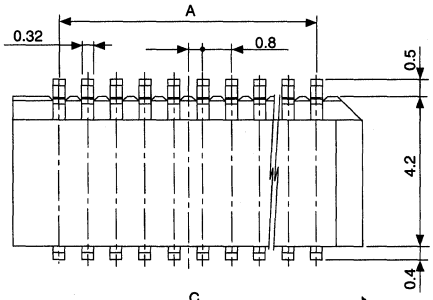


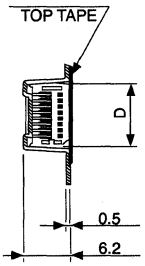


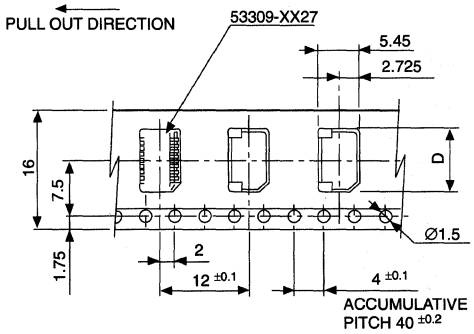
MATED DRAWING (REF.)

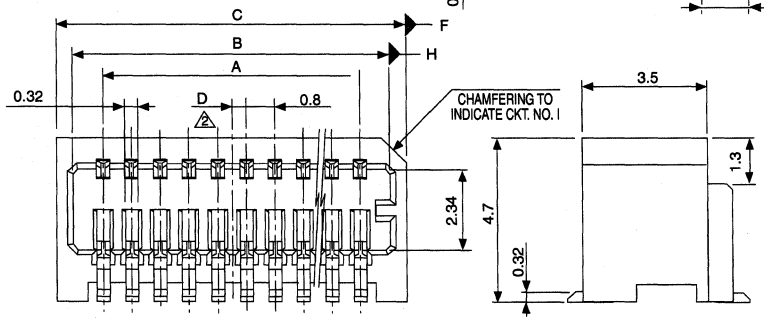


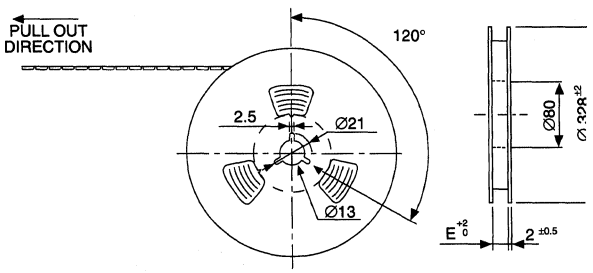
PCB LAYOUT











Ordering Information and Dimensions in mm

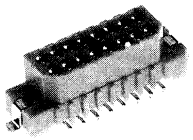
mm

Circuits	Order No.	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Tape Width
10	53309-1091	3.2	4.9	5.8	6.1	16.4	16
14	53309-1491	4.8	6.5	7.4	7.7	16.4	16
16	53309-1691	5.6	7.3	8.2	8.5	16.4	16
18	53309-1891	6.4	8.1	9.0	9.3	16.4	16
20	53309-2091	7.2	8.9	9.8	10.1	24.4	24
22	53309-2291	8.0	9.7	10.6	10.9	24.4	24
24	53309-2491	8.8	10.5	11.4	11.7	24.4	24
28	53309-2891	10.4	12.1	13.0	13.3	24.4	24
30	53309-3091	11.2	12.9	13.8	14.1	24.4	24

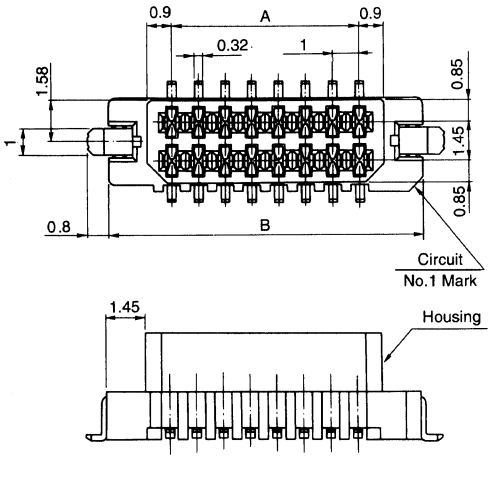
1.0mm .039" Center Board-to-Board System

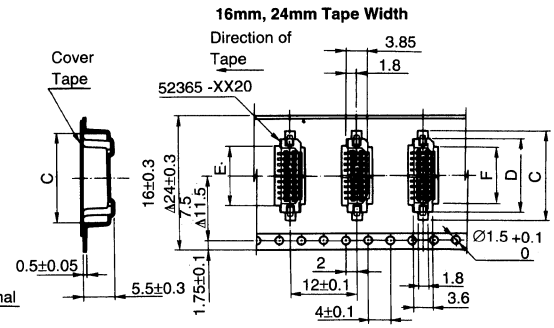
52365 Series

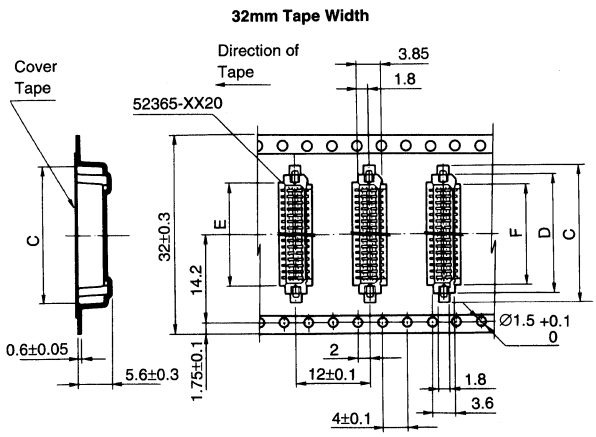
Dual Row
Surface Mount Receptacle

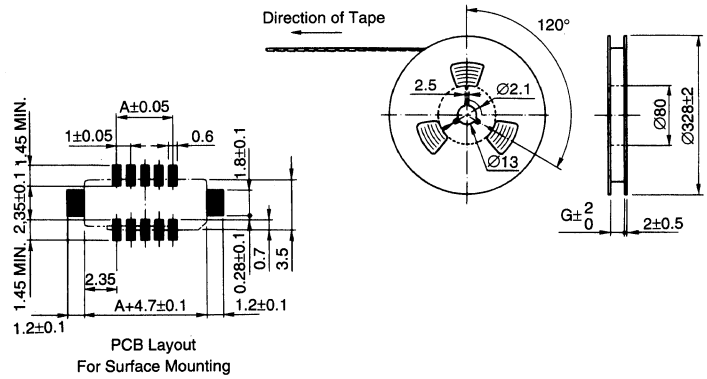


- Glass-filled nylon 4/6, UL 94V-0
- Tin plated phosphor bronze terminals
- Tin plated phosphor bronze solder tab
- 6-30 circuits
- Available in reel form only
- Mates with 53268 series









PCB Layout
For Surface Mounting

mm

L

Ordering Information and Dimensions in mm

Circuits	Order No.	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G	Tape Width
6	52365-0691	2.0	6.7	9.9	7.0	4.6	4.1	16.4	16.0
8	52365-0891	3.0	7.7	10.9	8.0	5.6	5.1	24.4	24.0
10	52365-1091	4.0	8.7	11.9	9.0	6.6	6.1	24.4	24.0
12	52365-1291	5.0	9.7	12.9	10.0	7.6	7.1	24.4	24.0
14	52365-1491	6.0	10.7	13.9	11.0	8.6	8.1	24.4	24.0
16	52365-1691	7.0	11.7	14.9	12.0	9.6	9.1	24.4	24.0
18	52365-1891	8.0	12.7	15.9	13.0	10.6	10.1	24.4	24.0
20	52365-2091	9.0	13.7	16.9	14.0	11.6	11.1	24.4	24.0
22	52365-2291	10.0	14.7	17.9	15.0	12.6	12.1	24.4	24.0
30	52365-3091	14.0	18.7	21.95	19.05	16.5	16.1	32.4	32.0

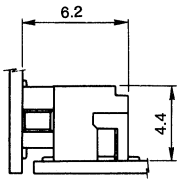
1.0mm .039" Center Board-to-Board System

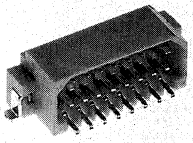
53268 Series

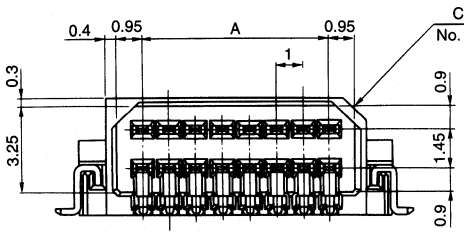
Dual Row Surface Mount Right Angle Header

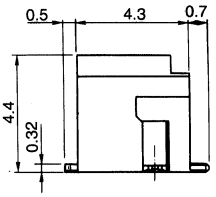
- Glass-filled nylon 4/6, UL 94V-0
- Tin plated phosphor bronze pins
- Tin plated phosphor bronze solder tab
- 6-30 circuits
- 50V, 0.5 amps max.
- Available in reel form only
- Mates with 52365 series

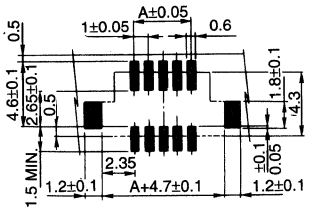
Mating Drawing
53268-XX20 - 53265-XX20



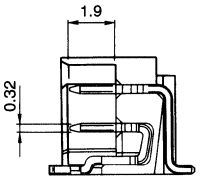


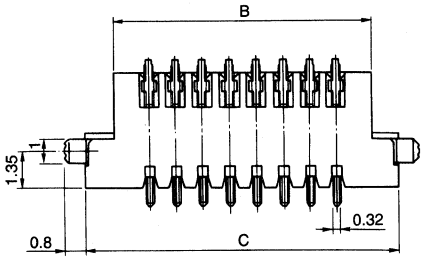




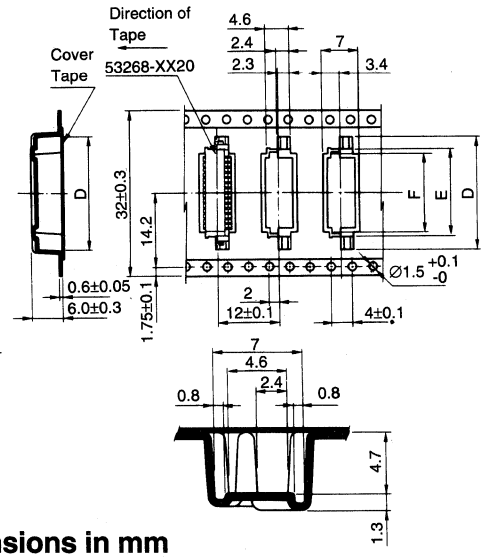


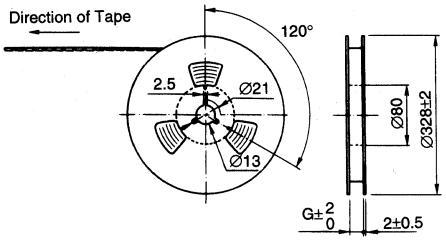
PCB Layout
For Surface Mounting



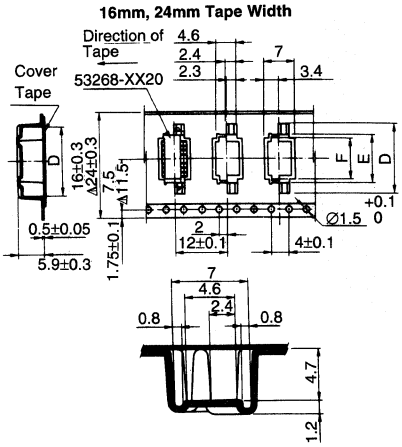


32mm Tape Width





16mm, 24mm Tape Width



mm

Ordering Information and Dimensions in mm

Circuits	Order No.	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G	Tape Width
6	53268-0691	2.0	4.7	6.7	9.9	5.0	3.1	16.4	16.0
8	53268-0891	3.0	5.7	7.7	10.9	6.0	4.1	24.4	24.0
10	53268-1091	4.0	6.7	8.7	11.9	7.0	5.1	24.4	24.0
12	53268-1291	5.0	7.7	9.7	12.9	8.0	6.1	24.4	24.0
14	53268-1491	6.0	8.7	10.7	13.9	9.0	7.1	24.4	24.0
16	53268-1691	7.0	9.7	11.7	14.9	10.0	8.1	24.4	24.0
18	53268-1891	8.0	10.7	12.7	15.9	11.0	9.1	24.4	24.0
20	53268-2091	9.0	11.7	13.7	16.9	12.0	10.1	24.4	24.0
22	53268-2291	10.0	12.7	14.7	17.9	13.0	11.1	24.4	24.0
30	53268-3091	14.0	16.7	18.7	21.9	17.0	15.15	32.4	32.0

1.25mm .049" Center Board-to-Board Connectors

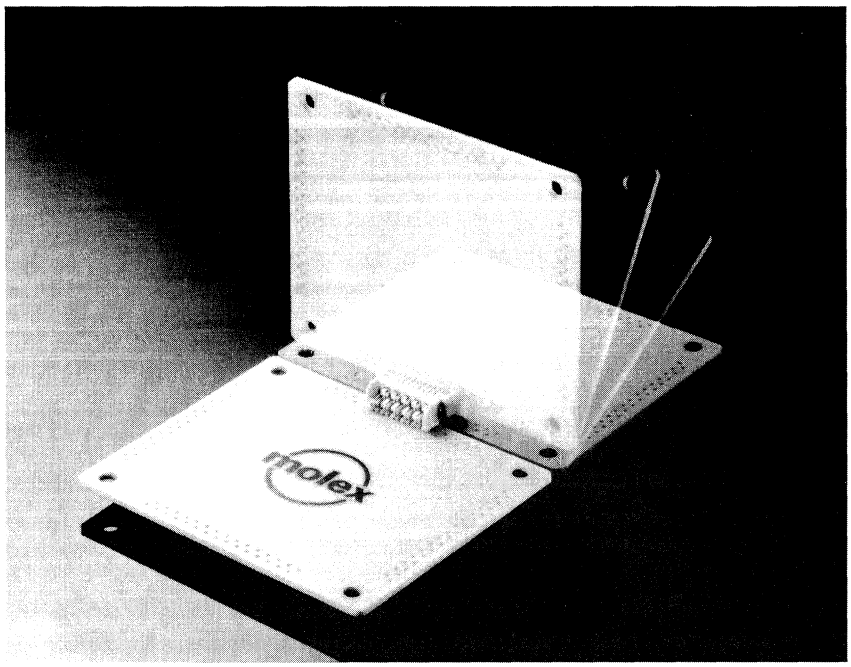
Introduction

Molex offers a wide variety of very small board-to-board connectors.

Included in this section are two of our newest versions on 1.25mm pitch center spacing.

The compact Hinged Connector shown right allows for circuit checking and functional adjustments with the PCB positioned at a variety of angles.

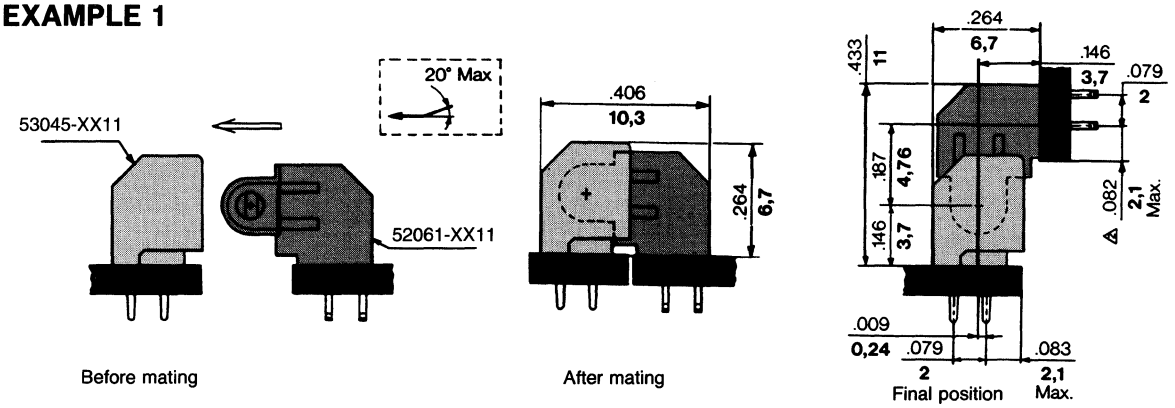
Our newest 1.25mm series is available in straight, right angle, dual and single row versions. Connectors in this series offer tremendous space savings. For example, the mating dimensions of our single row right angle version are only .110" 2,8mm high by .276" 7mm wide.



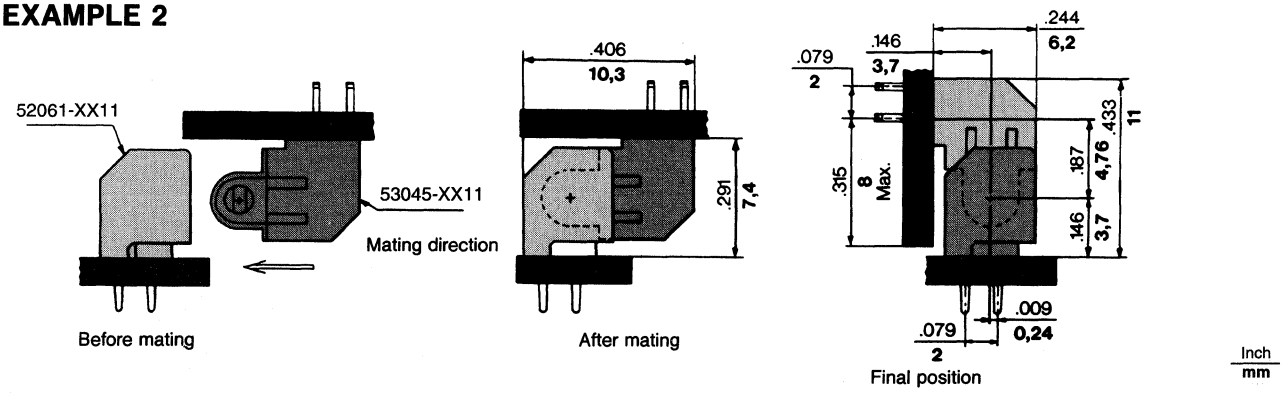
Hinged Connector

53045 and 52061 Series

EXAMPLE 1



EXAMPLE 2



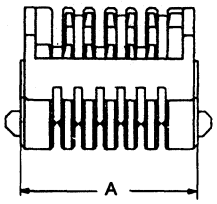
L

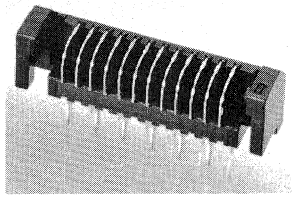
1.25mm .049" Center Hinged Board-to-Board System

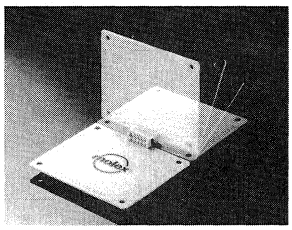
52061 Series

Hinged

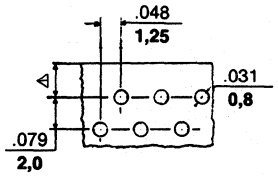
- Polyester, UL 94V-0
- Tin plated phosphor bronze terminals
- 4-20 circuits (even numbers only)
- 125V 1 amp max.
- Mates with 53045-XX11



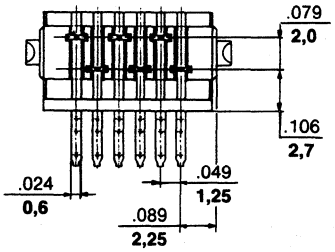


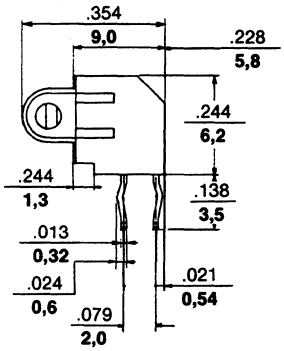


52061 and 53045 shown in Board-to-Board Application



PCB Layout





Inch / mm

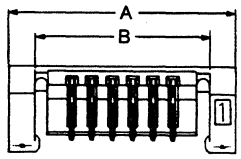
Ordering Information and Dimensions

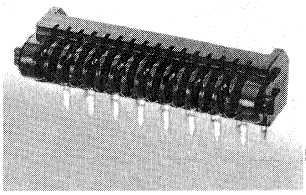
Circuits	Order No.	Dim. A	Circuits	Order No.	Dim. A
4	52061-0411	.325 **8,25**	14	52061-1411	.817 **20,75**
6	52061-0611	.423 **10,75**	16	52061-1611	.915 **23,25**
8	52061-0811	.522 **13,25**	18	52061-1811	1.014 **25,75**
10	52061-1011	.620 **15,75**	20	52061-2011	1.112 **28,25**
12	52061-1211	.719 **18,25**			

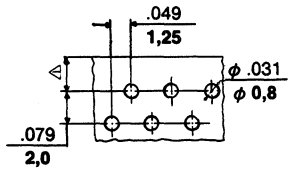
53045 Series

Hinged

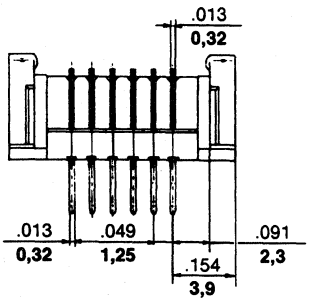
- Polyester, UL 94V-0
- Tin plated phosphor bronze pins
- 4-20 circuits (even numbers only)
- Mates with 50261-XX11

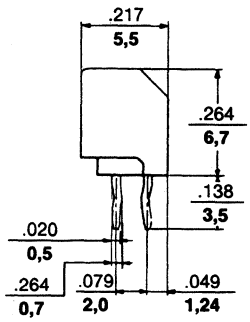






PCB Layout





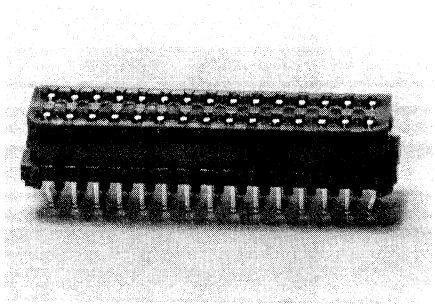
Inch / mm

Ordering Information and Dimensions

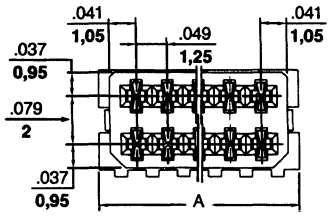
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
4	53045-0411	.454 **11,55**	.329 **8,35**	14	53045-1411	.947 **24,05**	.821 **20,85**
6	53045-0611	.553 **14,05**	.427 **10,85**	16	53045-1611	1.045 **26,55**	.919 **23,35**
8	53045-0811	.652 **16,55**	.526 **13,35**	18	53045-1811	1.144 **29,05**	1.017 **25,85**
10	53045-1011	.745 **19,05**	.624 **15,85**	20	53045-2011	1.242 **31,55**	1.116 **28,35**
12	53045-1211	.848 **21,55**	.722 **18,35**				

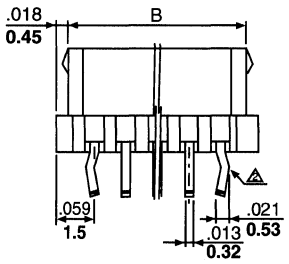
1.25mm .049" Center Board-to-Board System

52190 Series
Dual Row
Straight Receptacle

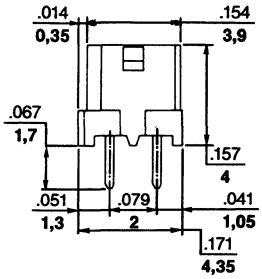


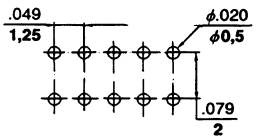
- Nylon 6/6, UL 94 V-0
- Tin plated phosphor bronze terminals
- 6-30 circuits (even numbers only)
- 50V, 0.5 amps max.
- Mates with: 53130
  53131





⚠ Kink to be applied for 4 pins at both ends.





PCB Layout

inch
mm

L

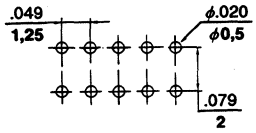
Ordering Information and Dimensions

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
6	52190-0617	.217 **5,50**	.181 **4,60**	20	52190-2017	.561 **14,25**	.526 **13,35**
8	52190-0817	.266 **6,75**	.230 **5,85**	22	52190-2217	.610 **15,50**	.575 **14,60**
10	52190-1017	.315 **8,00**	.280 **7,10**	24	52190-2417	.659 **16,75**	.624 **15,85**
12	52190-1217	.364 **9,25**	.329 **8,35**	26	52190-2617	.709 **18,00**	.673 **17,10**
14	52190-1417	.413 **10,50**	.378 **9,60**	28	52190-2817	.758 **19,25**	.722 **18,35**
16	52190-1617	.463 **11,75**	.427 **10,85**	30	52190-3017	.807 **20,50**	.771 **19,60**
18	52190-1817	.512 **13,00**	.476 **12,10**				

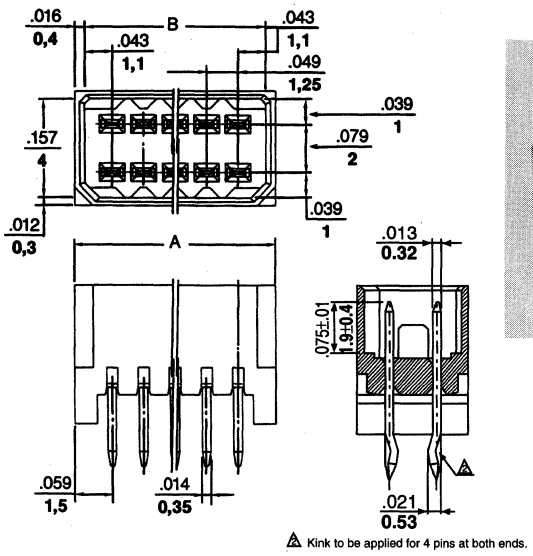
1.25mm .049" Center Board-to-Board System

53130 Series
Dual Row Straight Header

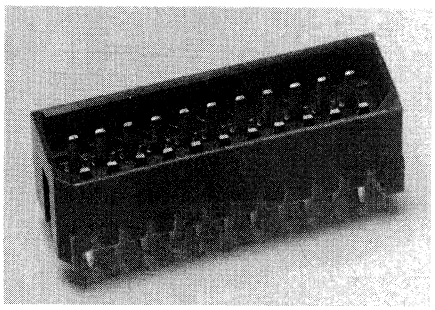
- Nylon 6/6, UL 94 V-0
- Tin plated phosphor bronze pins
- 6-30 circuits (even numbers only)
- Mates with 52190
- Mated height: 7mm .276
  Mated width: 4,6mm .181



PCB Layout



⚠ Kink to be applied for 4 pins at both ends.



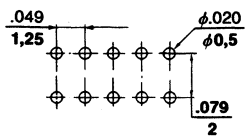
Ordering Information and Dimensions

inch / mm

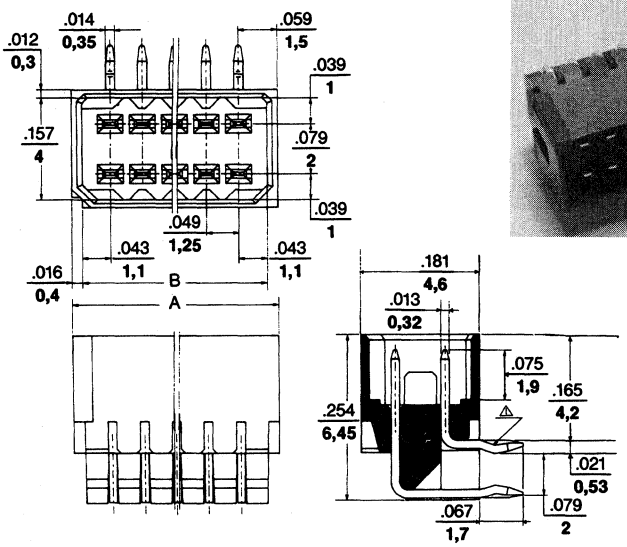
Circuits	Order No.	Dim. A		Dim. B		Circuits	Order No.	Dim. A		Dim. B	
6	53130-0617	.217	**5,50**	.185	**4,70**	20	53130-2017	.561	**14,25**	.530	**13,45**
8	53130-0817	.266	**6,75**	.234	**5,95**	22	53130-2217	.610	**15,50**	.579	**14,70**
10	53130-1017	.315	**8,00**	.283	**7,20**	24	53130-2417	.659	**16,75**	.628	**15,95**
12	53130-1217	.364	**9,25**	.333	**8,45**	26	53130-2617	.709	**18,00**	.677	**17,20**
14	53130-1417	.413	**10,50**	.382	**9,70**	28	53130-2817	.758	**19,25**	.726	**18,45**
16	53130-1617	.463	**11,75**	.431	**10,95**	30	53130-3017	.807	**20,50**	.776	**19,70**
18	53130-1817	.512	**13,00**	.480	**12,20**						

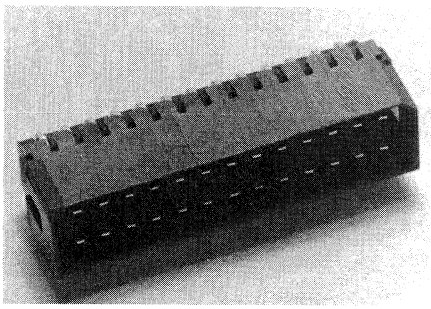
53131 Series
Dual Row Right Angle Header

- Nylon 6/6, UL 94 V-0
- Tin plated phosphor bronze pins
- 6-30 circuits (even numbers only)
- Mates with 52190
- Mated height: 7,95mm .313
  Mated width: 4,6mm .181



PCB Layout





Ordering Information and Dimensions

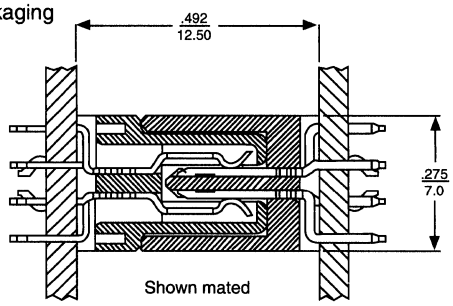
inch / mm

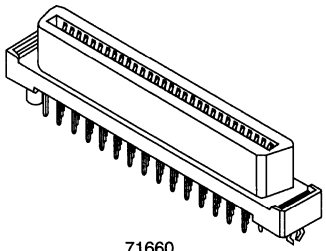
Circuits	Order No.	Dim. A		Dim. B		Circuits	Order No.	Dim. A		Dim. B	
6	53131-0617	.217	**5,50**	.185	**4,70**	20	53131-2017	.561	**14,25**	.530	**13,45**
8	53131-0817	.266	**6,75**	.234	**5,95**	22	53131-2217	.610	**15,50**	.579	**14,70**
10	53131-1017	.315	**8,00**	.283	**7,20**	24	53131-2417	.659	**16,75**	.628	**15,95**
12	53131-1217	.364	**9,25**	.333	**8,45**	26	53131-2617	.709	**18,00**	.677	**17,20**
14	53131-1417	.413	**10,50**	.382	**9,70**	28	53131-2817	.758	**19,25**	.726	**18,45**
16	53131-1617	.463	**11,75**	.431	**10,95**	30	53131-3017	.807	**20,50**	.776	**19,70**
18	53131-1817	.512	**13,00**	.480	**12,20**						

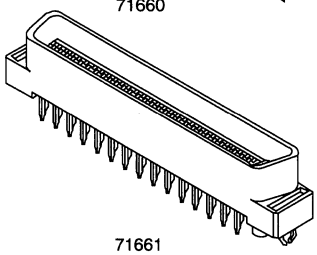
.050" 1.27mm Center EBBI 50-D

71660/71661 Series
High Density Economical Board-to-Board Connector System

- D-shaped leaf contact connector for parallel board packaging
- SMT compatible, high temperature 94V-0 LCP
- Low insertion forces for easy assembly
- Chamfered lead-in for blind mating
- Metal retention pegs for mechanical hold down before and after processing
- D-shaped for polarization
- Low profile - 12.5mm stack height
- Capable of up to 500 mating and unmating cycles
- Selectively gold plated to control cost
- Recommended for .062" 1.6mm PCB
- **Will not intermate with D-50L Series**




71660


71661

Specifications

Physical:

Housing: 94V-0 Liquid crystal polymer

Contacts: Phosphor bronze alloy

Retention Pegs: Phosphor bronze alloy

Plating: Post plate 30 microinches gold over 50 microinches nickel min. in contact area, 100 microinches tin/lead over 50 microinches nickel min. on tails

Electrical:

Initial Contact Resistance: 20 milliohm max.

Insulation Resistance: 1000 megohm min.

Dielectric Strength: No breakdown after 500 VAC for one minute

Environmental:

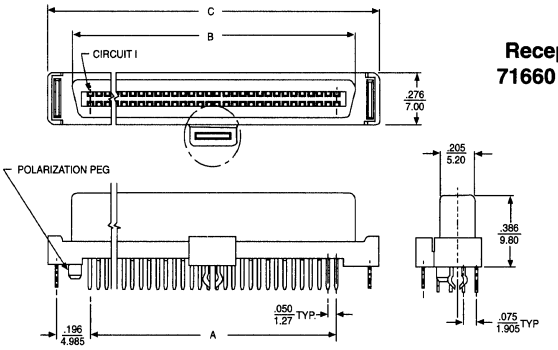
-40°C to +80°C (operating/ storage)

Mechanical:

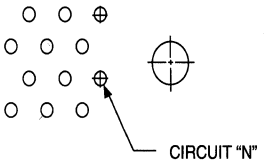
Mating Force: 90 grams max. per contact

Unmating Force: 15 grams min. per contact

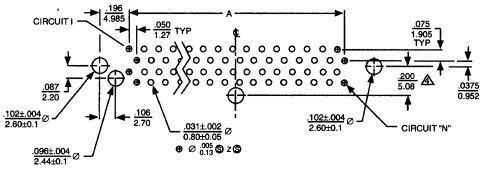
inch / mm



Receptacle 71660 Series

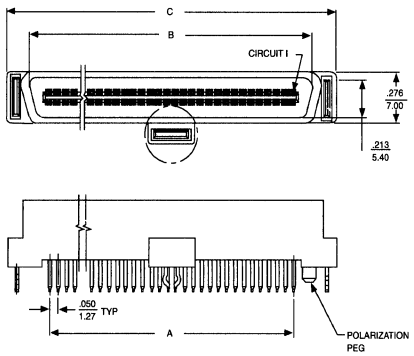


(For 30, 50, 130 circuits only)

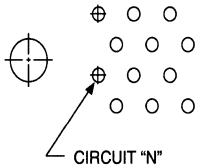


PCB Layout
(For 40, 60, 68, 80, 100, 120 circuits only)

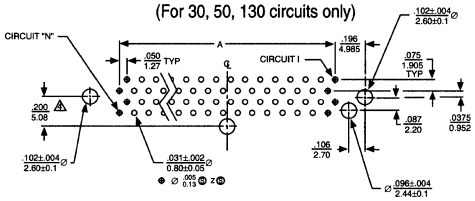
⚠ Center peg is for 120 and 130 circuit sizes only.



Plug 71661 Series



(For 30, 50, 130 circuits only)



PCB Layout
(For 40, 60, 80, 100, 120 circuits only)

⚠ Center peg is for 120 and 130 circuit sizes only.

Ordering Information and Dimensions

71660 Receptacle									
Circuits	Order No.	Dim. A		Dim. B		Dim. C	
30	15-92-1030	.700	17.78	.918	23.32	1.199	30.45
40	15-92-1040	.950	24.13	1.168	29.67	1.449	36.80
50	15-92-1050	1.200	30.48	1.418	36.02	1.699	43.15
60	15-92-1060	1.450	36.83	1.668	42.37	1.949	49.50
68	15-92-1068	1.650	41.91	1.868	47.45	2.149	54.58
80	15-92-1080	1.950	49.53	2.168	55.07	2.449	62.20
100	15-92-1100	2.450	62.23	2.668	67.77	2.949	74.90
120	15-92-1120	2.950	74.93	3.168	80.47	3.449	87.60
130	15-92-1130	3.200	81.28	3.418	86.82	3.699	93.95

71661 Plug									
Circuits	Order No.	Dim. A		Dim. B		Dim. C	
30	15-92-2030	.700	17.78	.925	23.52	1.199	30.45
40	15-92-2040	.950	24.13	1.176	29.87	1.449	36.80
50	15-92-2050	1.200	30.48	1.426	36.22	1.699	43.15
60	15-92-2060	1.450	36.83	1.676	42.57	1.949	49.50
68	15-92-2068	1.650	41.91	1.875	47.65	2.149	54.58
80	15-92-2080	1.950	49.53	2.176	55.27	2.449	62.20
100	15-92-2100	2.450	62.23	2.676	67.97	2.949	74.90
120	15-92-2120	2.950	74.93	3.176	80.67	3.449	87.60
130	15-92-2130	3.200	81.28	3.426	87.02	3.699	93.95

.050" 1.27mm Center D-50L

Introduction

Molex's new D-50L leaf-type connector system is the newest addition to our high-density board-to-board connectors. D-50L connectors are available in a variety of styles in 20-100 circuits.

The D-50L series includes a plug and receptacle in both straight and right-angle forms. This provides for a full range of board-to-board configurations.

The Molex D-50L system utilizes a leaf-style contact design that offers low insertion force and high mating reliability.

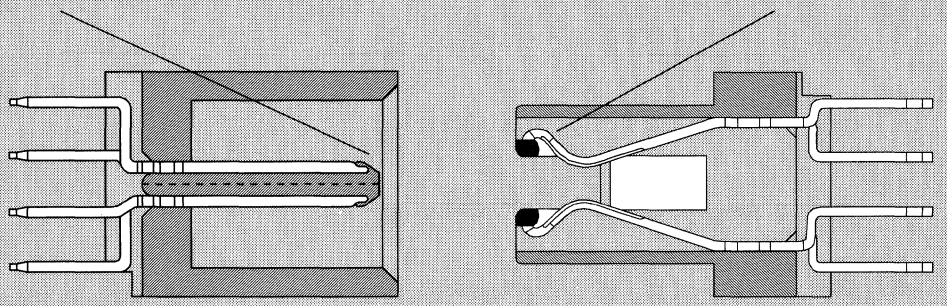
The leaf-style plug design and bellows-style receptacle ensure contact forces are maintained in high pin-count applications. The leaf-style design also holds the male terminals firmly in place, and protects them from being bent or mis-aligned during mating.

The housing design of the receptacle facilitates mating with molded slots that allow the plug to be twisted in and out. The D-style shroud on the plug assures visual orientation as well as physical polarization.

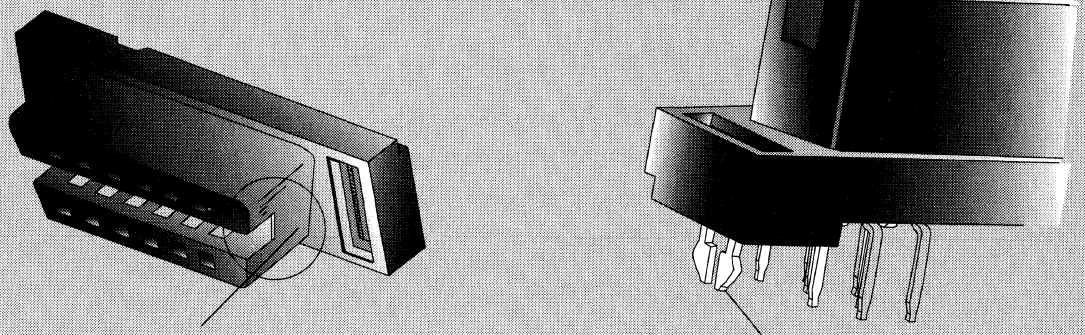
Contact Features

Leaf-style design protects male terminals from damage during mating.

Bellows-style female terminal provides low insertion force and reliable contact.



Housing Features



Molded-in slot on receptacle allows plug to be twisted in and out.

Optional metal hold-down provides secure retention during wave soldering.

L

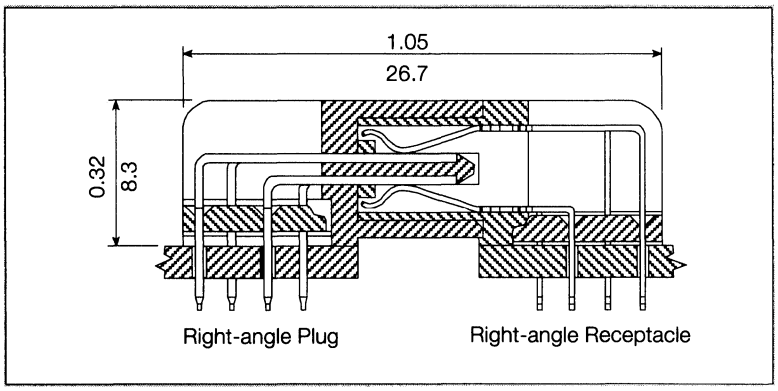
Specifications

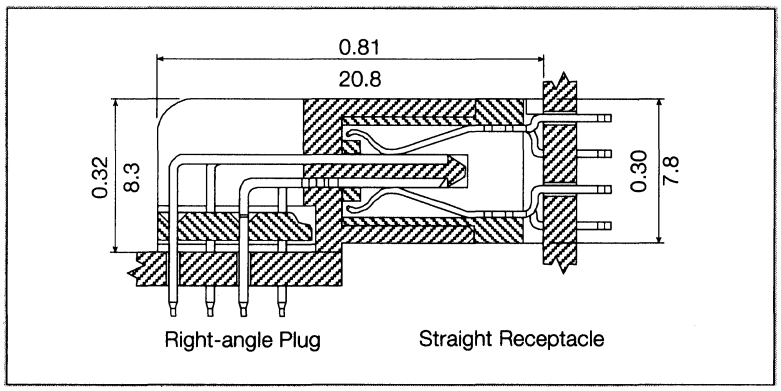
Insulation Resistance: 1000MΩ min. (at DC 500V).
Dielectric Withstanding Voltage: 500V DC applied between adjacent terminals.
Contact Resistance: 20 mΩ max. in dry circuit condition.
Rated Voltage: 125V
Rated Current: 0.5 amps max.

.050" 1.27mm Center
D-50L Plug and Receptacle

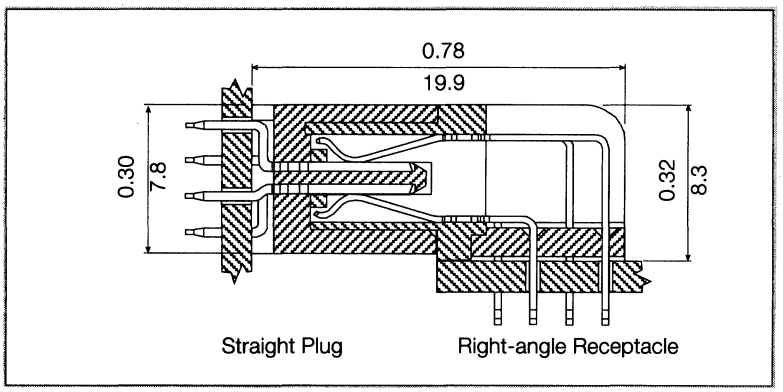
Mating Options

(1) Horizontal

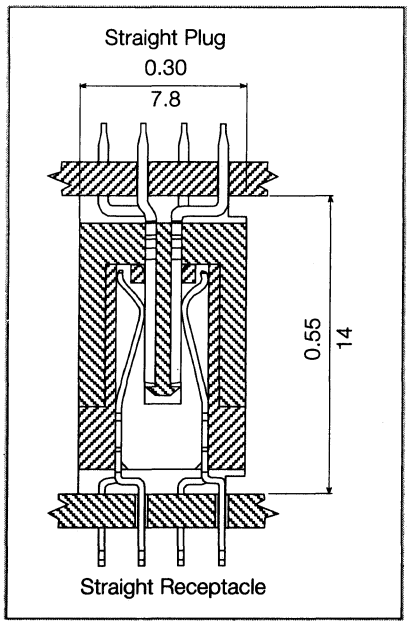




(2) Right-angle



(3) Right-angle



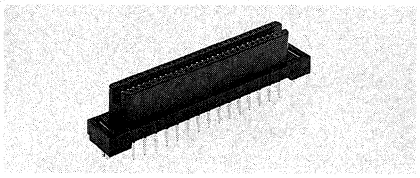
(4) Stacking

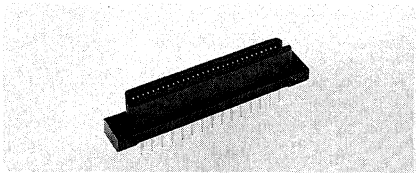
L

inch
mm

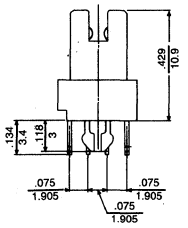
.050" 1.27mm Center
D-50L

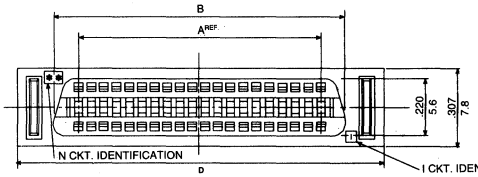
52326 Series (With Metal Peg)
52368 Series (Without Metal Peg)
Dual Row, Straight Receptacle

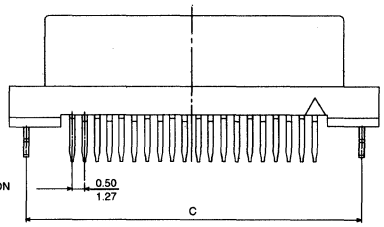


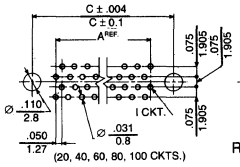


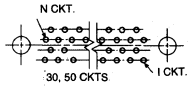
- 20-100 circuits
- Housing: Glass-filled polyester, UL 94V-0
- Terminal: Phosphor bronze
- Metal Peg: Phosphor bronze
- Plating: Selective gold flash
- Mates with: 52411/52340 Series
  52327/52412 Series
- **Will not intermate with EBBI 50-D Series**











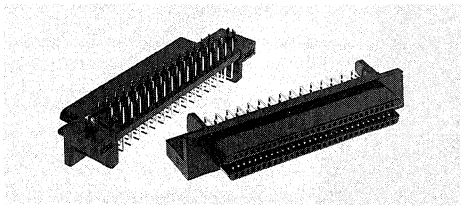
Recommended PCB Layout

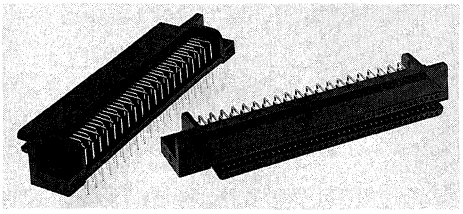
inch
mm

Ordering Information and Dimensions

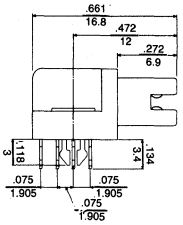
Circuit Size	Order No. - Metal Peg	Order No. - W/O Metal Peg	Dim. A	Dim. B	Dim. C	Dim. D
20	52326-0201	52368-0201	.450/11,43	.646/16,40	.800/20,32	.935/23,75
30	52326-0301	52368-0301	.700/17,78	.896/22,75	1.050/26,67	1.185/30,10
40	52326-0401	52368-0401	.950/24,13	1.146/29,10	1.300/33,02	1.435/36,45
50	52326-0501	52368-0501	1.200/30,48	1.396/35,45	1.550/39,37	1.685/42,80
60	52326-0601	52368-0601	1.450/36,83	1.646/41,80	1.800/45,72	1.935/49,15
80	52326-0801	52368-0801	1.950/49,53	2.146/54,50	2.300/58,42	2.435/61,85
100	52326-1001	52368-1001	2.450/62,23	2.646/67,20	2.800/71,12	2.935/74,55

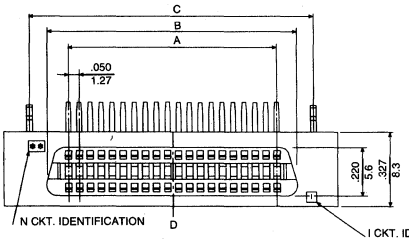
52409 Series (With Metal Peg)
52410 Series (Without Metal Peg)
Dual Row, Right Angle Receptacle

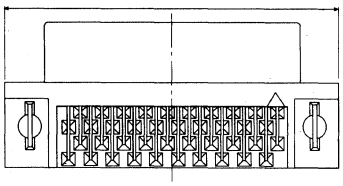


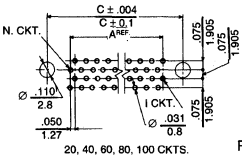


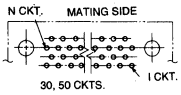
- 20-100 circuits
- Housing: Glass-filled polyester, UL 94V-0
- Terminal: Phosphor bronze
- Metal Peg: Phosphor bronze
- Plating: Selective gold flash
- Mates with: 52411/52340 Series
  52327/52412 Series
- **Will not intermate with EBBI 50-D Series**











Recommended PCB Layout

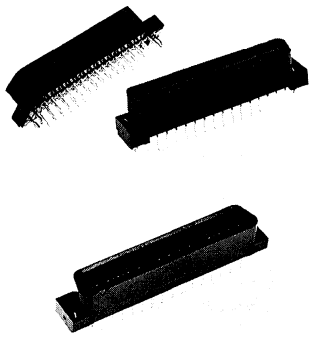
inch
mm

Ordering Information and Dimensions

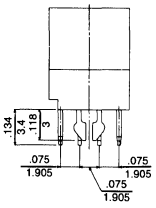
Circuit Size	Order No. - Metal Peg	Order No. - W/O Metal Peg	Dim. A	Dim. B	Dim. C	Dim. D
20	52409-0201	52410-0201	.450/11,43	.646/16,40	.800/20,32	1.024/26,00
30	52409-0301	52410-0301	.700/17,78	.896/22,75	1.050/26,67	1.274/32,35
40	52409-0401	52410-0401	.950/24,13	1.146/29,10	1.300/33,02	1.524/38,70
50	52409-0501	52410-0501	1.200/30,48	1.396/35,45	1.550/39,37	1.774/45,05
60	52409-0601	52410-0601	1.450/36,83	1.646/41,80	1.800/45,72	2.024/51,40
80	52409-0801	52410-0801	1.950/49,53	2.146/54,50	2.300/58,42	2.524/64,10
100	52409-1001	52410-1001	2.450/62,23	2.646/67,20	2.800/71,12	3.024/76,80

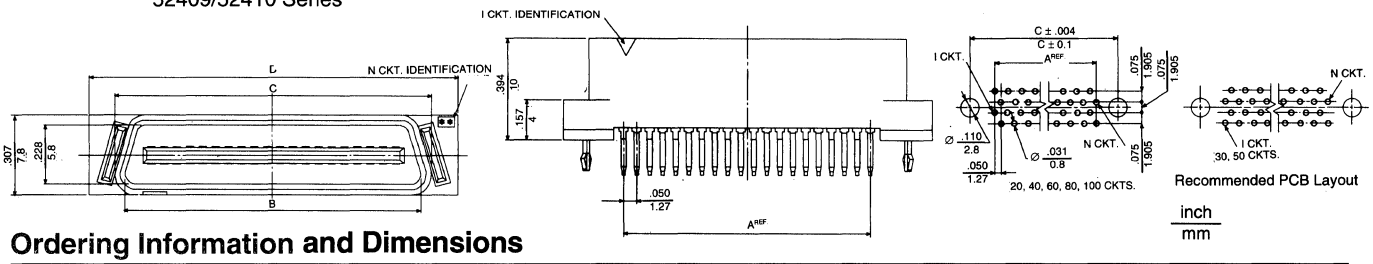
.050" 1.27mm Center
D-50L

52411 Series (With Metal Peg)
52340 Series (Without Metal Peg)
Dual Row, Straight Header



- 20-100 circuits
- Housing: Glass-filled polyester, UL 94V-0
- Terminal: Brass
- Metal Peg: Phosphor bronze
- Plating: Selective gold flash
- Mates with: 52326/52368 Series
  52409/52410 Series



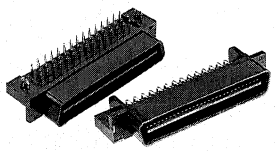


inch
mm

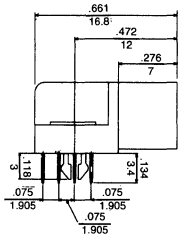
Ordering Information and Dimensions

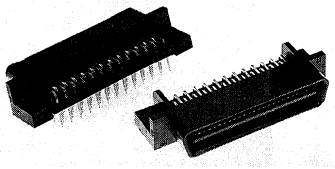
Circuit Size	Order No. - Metal Peg	Order No. - W/O Metal Peg	Dim. A	Dim. B	Dim. C	Dim. D
20	52411-0201	52340-0201	.450/11,43	.652/16,56	.750/19,05	.935/23,75
30	52411-0301	52340-0301	.700/17,78	.902/22,91	1.000/25,40	1.185/30,10
40	52411-0401	52340-0401	.950/24,13	1.152/29,26	1.250/31,75	1.435/36,45
50	52411-0501	52340-0501	1.200/30,48	1.402/35,61	1.500/38,10	1.685/42,80
60	52411-0601	52340-0601	1.450/36,83	1.652/41,96	1.750/44,45	1.935/49,15
80	52411-0801	52340-0801	1.950/49,53	2.152/54,66	2.250/57,15	2.435/61,85
100	52411-1001	52340-1001	2.450/62,23	2.652/67,36	2.750/69,85	2.935/74,55

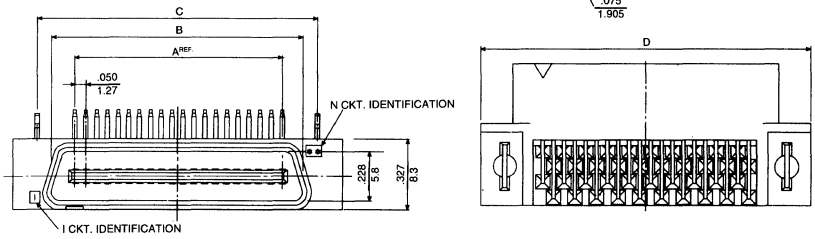
52327 Series (With Metal Peg)
52412 Series (Without Metal Peg)
Dual Row, Right Angle Header



- 20-100 circuits
- Housing: Glass-filled polyester, UL 94V-0
- Terminal: Brass
- Metal Peg: Phosphor bronze
- Plating: Selective gold flash
- Mates with: 52326/52368 Series
  52409/52410 Series







inch
mm

Ordering Information and Dimensions

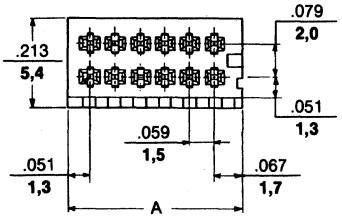
Circuit Size	Order No. - Metal Peg	Order No. - W/O Metal Peg	Dim. A	Dim. B	Dim. C	Dim. D
20	52327-0201	52412-0201	.450/11,43	.652/16,56	.800/20,32	1.024/26,00
30	52327-0301	52412-0301	.700/17,78	.902/22,91	1.050/26,67	1.274/32,35
40	52327-0401	52412-0401	.950/24,13	1.152/29,26	1.300/33,02	1.524/38,70
50	52327-0501	52412-0501	1.200/30,48	1.402/35,61	1.550/39,37	1.774/45,05
60	52327-0601	52412-0601	1.450/36,83	1.652/41,96	1.800/45,72	2.024/51,40
80	52327-0801	52412-0801	1.950/49,53	2.152/54,66	2.300/58,42	2.524/64,10
100	52327-1001	52412-1001	2.450/62,23	2.652/67,36	2.800/71,12	3.024/76,80

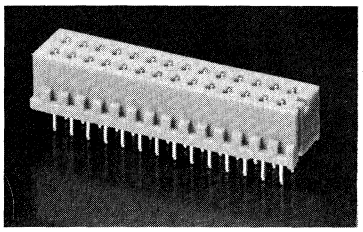
L

1.5mm .059" Center Board-to-Board System

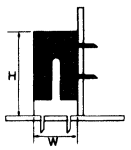
52022 Series
Dual Row, Straight Receptacle

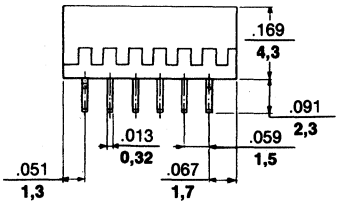
- Nylon 6/6, UL 94V-0
- Tin plated phosphor bronze terminals
- 6-30 circuits
- 125V, 1 amp max.
- Mates with 53020
- High pressure tuning fork terminal

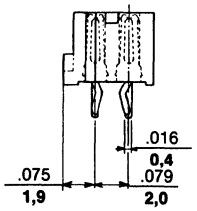




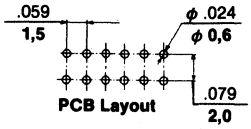
Mating With
52022-XX10 - 53020-XX10
H = 7.3mm W = 5.5mm







End tails kinked for 6 and 8 circuit versions only



inch / mm

Dimensions

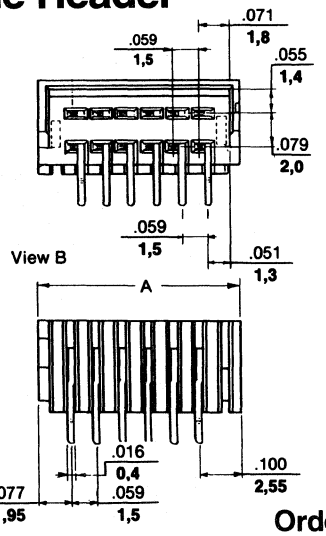
Circuits	Dim. A		Circuits	Dim. A	
6	.236	6,0	20	.650	16,5
8	.295	7,5	22	.709	18,0
10	.354	9,0	24	.768	19,5
12	.413	10,5	26	.827	21,0
14	.472	12,0	28	.886	22,5
16	.531	13,5	30	.945	24,0
18	.591	15,0			

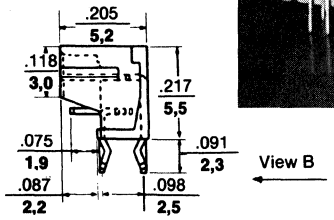
Ordering Information

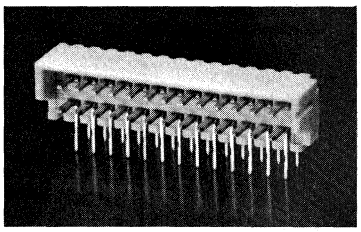
Circuits	Order No.	Circuits	Order No.
6	52022-0610	20	52022-2010
8	52022-0810	22	52022-2210
10	52022-1010	24	52022-2410
12	52022-1210	26	52022-2610
14	52022-1410	28	52022-2810
16	52022-1610	30	52022-3010
18	52022-1810		

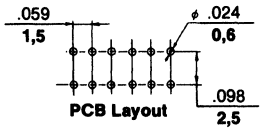
53020 Series
Dual Row, Right Angle Header

- Nylon 6/6, UL 94V-0
- Tin plated phosphor bronze pins
- 6-30 circuits
- Mates with 52022









inch / mm

Dimensions

Circuits	Dim. A		Circuits	Dim. A	
6	.295	7,5	20	.709	18,0
8	.354	9,0	22	.768	19,5
10	.413	10,5	24	.827	21,0
12	.472	12,0	26	.886	22,5
14	.531	13,5	28	.945	24,0
16	.591	15,0	30	1.004	25,5
18	.650	16,5			

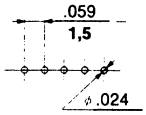
Ordering Information

Circuits	Order No.	Circuits	Order No.
6	53020-0610	20	53020-2010
8	53020-0810	22	53020-2210
10	53020-1010	24	53020-2410
12	53020-1210	26	53020-2610
14	53020-1410	28	53020-2810
16	53020-1610	30	53020-3010
18	53020-1810		

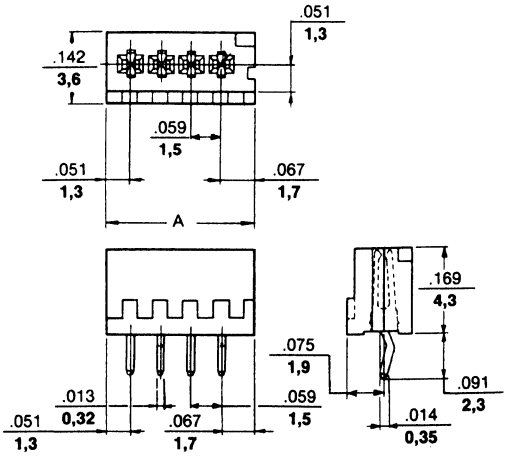
1.5mm .059" Center Board-to-Board System

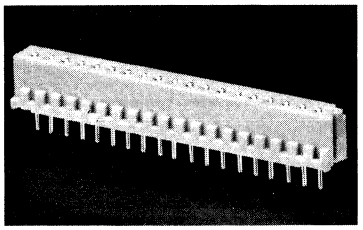
52024 Series
Single Row Straight Receptacle

- Nylon 6/6, UL 94V-0
- Tin plated phosphor bronze terminals
- 2-20 circuits
- 125V, 1 amp max.
- Mates with 53022

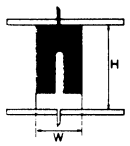


PCB Layout





Mating With
52024-XX10 - 53022-XX10
H = 6mm W = 3.7mm



inch / mm

Dimensions

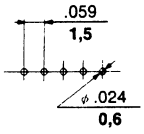
Circuits	Dim. A		Circuits	Dim. A	
2	.177	4,5	12	.768	19,5
3	.236	6,0	13	.827	21,0
4	.295	7,5	14	.886	22,5
5	.354	9,0	15	.945	24,0
6	.413	10,5	16	1.004	25,5
7	.472	12,0	17	1.063	27,0
8	.531	13,5	18	1.122	28,5
9	.591	15,0	19	1.181	30,0
10	.650	16,5	20	1.240	31,5
11	.709	18,0			

Ordering Information

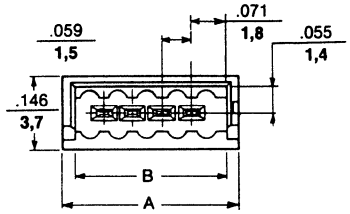
Circuits	Order No.	Circuits	Order No.
2	52024-0210	12	52024-1210
3	52024-0310	13	52024-1310
4	52024-0410	14	52024-1410
5	52024-0510	15	52024-1510
6	52024-0610	16	52024-1610
7	52024-0710	17	52024-1710
8	52024-0810	18	52024-1810
9	52024-0910	19	52024-1910
10	52024-1010	20	52024-2010
11	52024-1110		

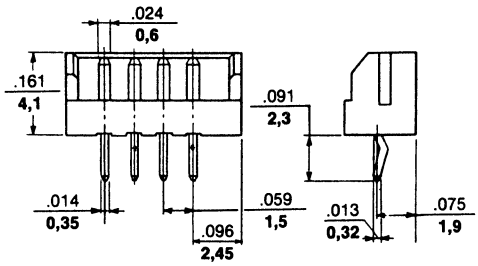
53022 Series
Single Row Straight Header

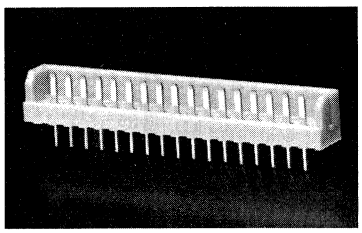
- Nylon 6/6, UL 94V-0
- Tin plated phosphor bronze pins
- 2-20 circuits
- Mates with 52024



PCB Layout







inch / mm

Dimensions

Circuits	Dim. A		Dim. B		Circuits	Dim. A		Dim. B	
2	.236	6,0	.185	4,7	12	.827	21,0	.776	19,7
3	.295	7,5	.244	6,2	13	.886	22,5	.835	21,2
4	.354	9,0	.303	7,7	14	.945	24,0	.894	22,7
5	.413	10,5	.362	9,2	15	1.004	25,5	.853	24,2
6	.472	12,0	.421	10,7	16	1.063	27,0	1.012	25,7
7	.531	13,5	.480	12,2	17	1.122	28,5	1.071	27,2
8	.591	15,0	.539	13,7	18	1.181	30,0	1.130	28,7
9	.650	16,5	.598	15,2	19	1.240	31,5	1.189	30,2
10	.709	18,0	.657	16,7	20	1.299	33,0	1.248	31,7
11	.768	19,5	.717	18,2					

Ordering Information

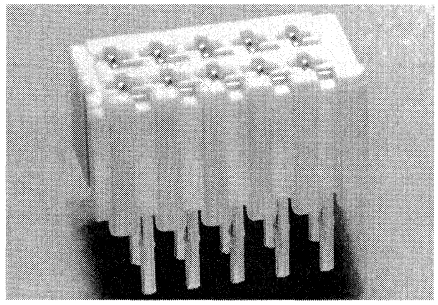
Circuits	Order No.	Circuits	Order No.
2	53022-0210	12	53022-1210
3	53022-0310	13	53022-1310
4	53022-0410	14	53022-1410
5	53022-0510	15	53022-1510
6	53022-0610	16	53022-1610
7	53022-0710	17	53022-1710
8	53022-0810	18	53022-1810
9	53022-0910	19	53022-1910
10	53022-1010	20	53022-2010
11	53022-1110		

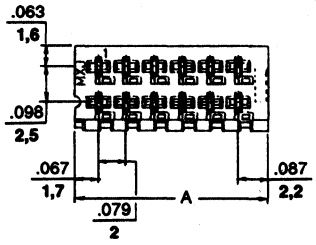
L

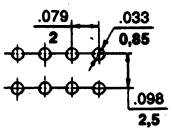
2.0mm .079" Center Board-to-Board System

5533-NCPB
Dual Row Straight Receptacle

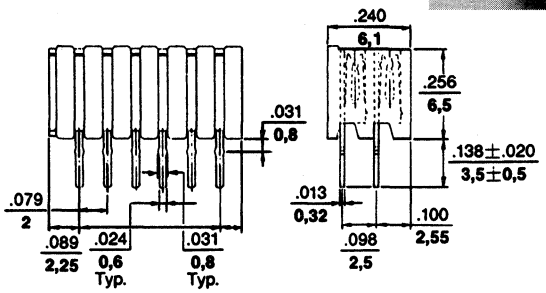
- Nylon 6/6, UL 94V-0
- Tin plated phosphor bronze terminals
- 6-40 circuits
- 125V, 1.5 amps max.
- Mates with 5532-NA







PCB Hole Layout



inch / mm

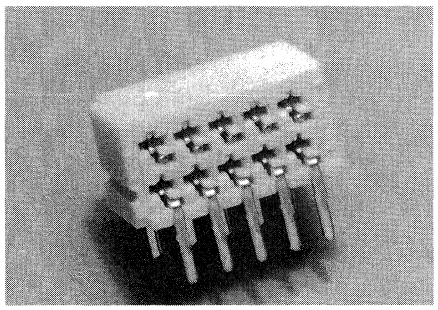
Specification/Dimensions 5533 NCPB - see next page

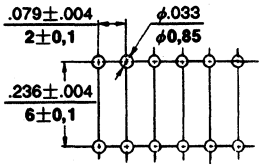
Ordering Information 5533-NCPB

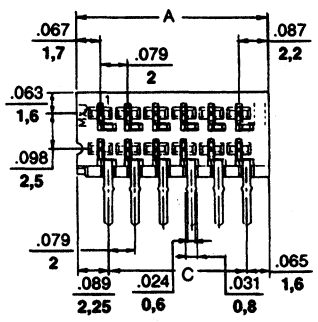
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
6	39-51-3062	12	39-51-3122	18	39-51-3182	24	39-51-3242	30	39-51-3302	36	39-51-3362
8	39-51-3082	14	39-51-3142	20	39-51-3202	26	39-51-3262	32	39-51-3322	38	39-51-3382
10	39-51-3102	16	39-51-3162	22	39-51-3222	28	39-51-3282	34	39-51-3342	40	39-51-3402

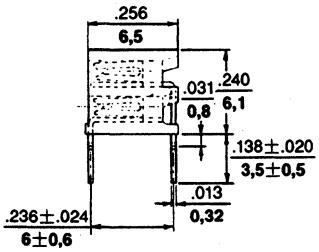
5533-NAPB
Dual Row Right Angle Receptacle

- Nylon 6/6, UL 94V-0
- Tin plated phosphor bronze terminals
- 6-40 circuits
- 125V, 1.5 amps max.
- Mates with 5532-NA









inch / mm

Specification/Dimensions 5533 NAPB - see next page

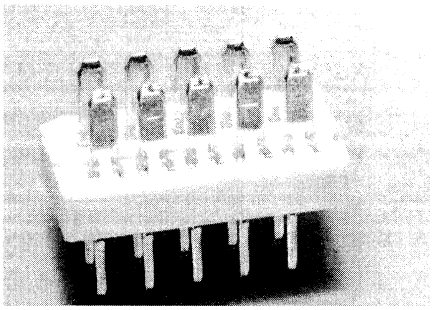
Ordering Information 5533-NAPB

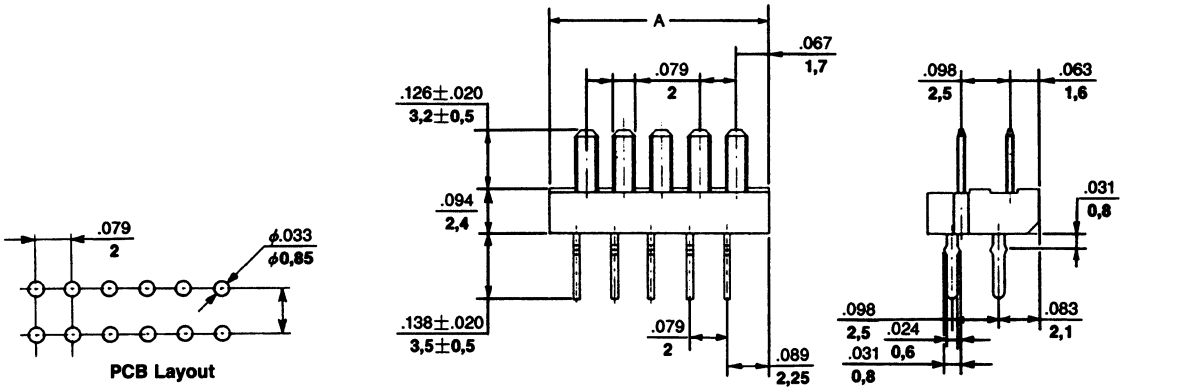
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
6	39-51-2069	12	39-51-2129	18	39-51-2189	24	39-51-2249	30	39-51-2309	36	39-51-2369
8	39-51-2089	14	39-51-2149	20	39-51-2209	26	39-51-2269	32	39-51-2329	38	39-51-2389
10	39-51-2109	16	39-51-2169	22	39-51-2229	28	39-51-2289	34	39-51-2349	40	39-51-2409

2.0mm .079" Center Board-to-Board System

5532-NA

- Nylon 6/6, UL 94V-0
- Tin plated brass pins
- 6-40 circuits
- Mates with: 5533-NAPB, 5533-NCPB





inch / mm

Electrical:

Rated Voltage and Current — 125V AC/DC, 1.5 amps
Contact Resistance — 20 milliohms (mΩ)
Dielectric Strength — 500V 1 min.
Insulation Resistance — 1000 megohms min. (MΩ)

Mechanical:

Terminal Retention Force — 1 kg min.

Environmental:

Ambient Temperature Range — –40°C ~105°C

L

Dimensions 5532-NA, 5533-NAPB, 5533-NCPB

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
6	.311 **7,9**	14	.626 **15,9**	22	.941 **23,9**	30	1.256 **31,9**	36	1.492 **37,9**
8	.390 **9,9**	16	.705 **17,9**	24	1.020 **25,9**	32	1.335 **33,9**	38	1.571 **39,9**
10	.469 **11,9**	18	.783 **19,9**	26	1.098 **27,9**	34	1.413 **35,9**	40	1.650 **41,9**
12	.547 **13,9**	20	.862 **21,9**	28	1.177 **29,9**				

Ordering Information 5532-NA

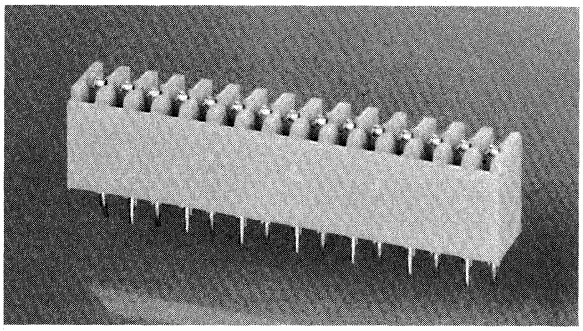
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
6	39-26-9067	12	39-26-9127	18	39-26-9187	24	39-26-9247	30	39-26-9307	36	39-26-9367
8	39-26-9087	14	39-26-9147	20	39-26-9207	26	39-26-9267	32	39-26-9327	38	39-26-9387
10	39-26-9107	16	39-26-9167	22	39-26-9227	28	39-26-9287	34	39-26-9347	40	39-26-9407

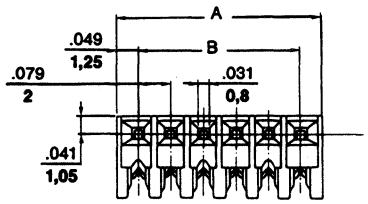
2.0mm .079" Center Board-to-Board System

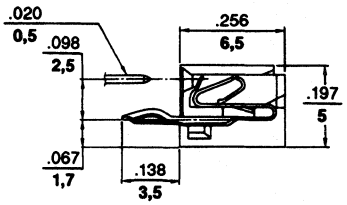
52084 Series
Board Spacer Receptacle

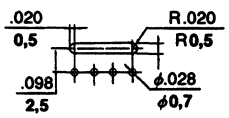
- Nylon 6/6, UL 94V-0
- Tin plated phosphor bronze terminals
- 5-15 circuits
- 125V, 1.5 amps max.

Mates with: 53064
53095

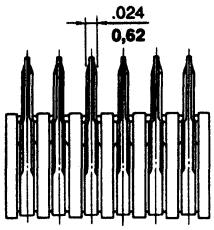








PCB Layout



L

inch
mm

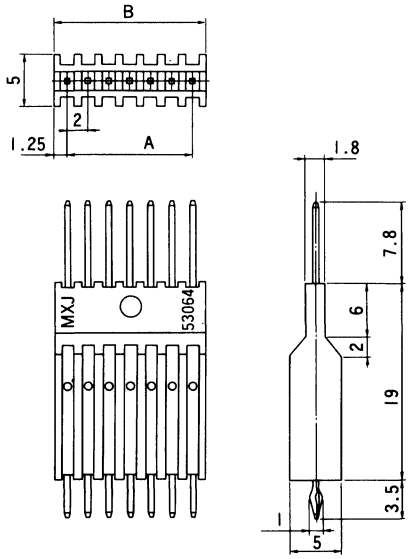
Ordering Information and Dimensions

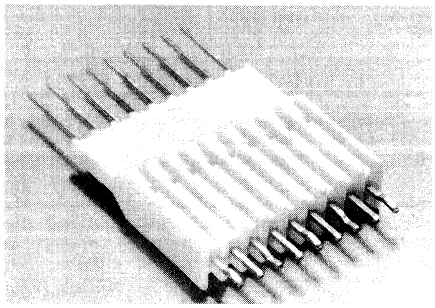
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
5	52084-0510	.413 **10,5**	.315 **8**	11	52084-1110	.886 **22,5**	.787 **20**
6	52084-0610	.492 **12,5**	.394 **10**	12	52084-1210	.965 **24,5**	.866 **22**
7	52084-0710	.571 **14,5**	.472 **12**	13	52084-1310	1.043 **26,5**	.949 **24**
8	52084-0810	.650 **16,5**	.551 **14**	14	52084-1410	1.122 **28,5**	1.024 **26**
9	52084-0910	.728 **18,5**	.630 **16**	15	52084-1510	1,201 **30,5**	1.102 **28**
10	52084-1010	.807 **20,5**	.709 **18**				

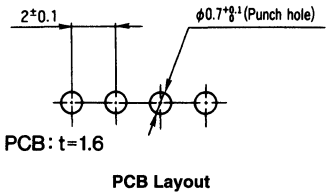
2.0mm .079" Center Board-to-Board System

53064 Series
Board Spacer Straight Header

- Nylon 6/6, UL 94V-0
- Tin plated brass pins
- 5-10 circuits
- 125V, 1 amp max.
- Mates with 52084 Series







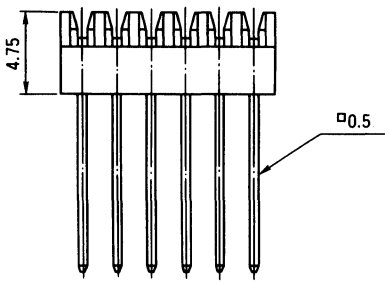
PCB Layout

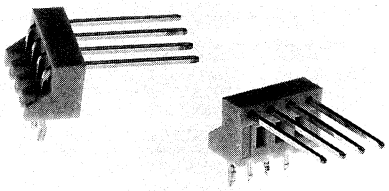
Ordering Information and Dimensions in mm

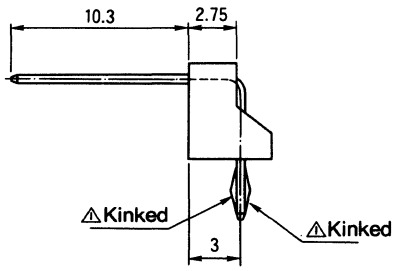
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
5	53064-0510	8	10.5	8	53064-0810	14	16.5
6	53064-0610	10	12.5	9	53064-0910	16	18.5
7	53064-0710	12	14.5	10	53064-1010	18	20.5

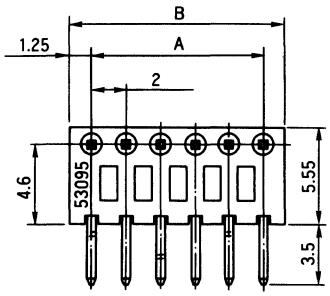
53095 Series
Board Spacer Right Angle Header

- Nylon 6/6, UL 94V-0
- Tin plated brass pins
- 5-15 circuits
- 125V, 1 amp max.
- Mates with 52084 Series

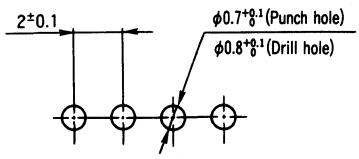








⚠Every other PC tail kinked opposite way.



PCB Layout

Ordering Information and Dimensions in mm

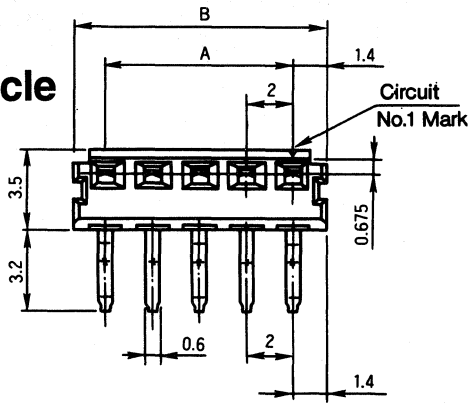
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
5	53095-0510	8.0	10.5	11	53095-1110	20.0	22.5
6	53095-0610	10.0	12.5	12	53095-1210	22.0	24.5
7	53095-0710	12.0	14.5	13	53095-1310	24.0	26.5
8	53095-0810	14.0	16.5	14	53095-1410	26.0	28.5
9	53095-0910	16.0	18.5	15	53095-1510	28.0	30.5
10	53095-1010	18.0	20.5				

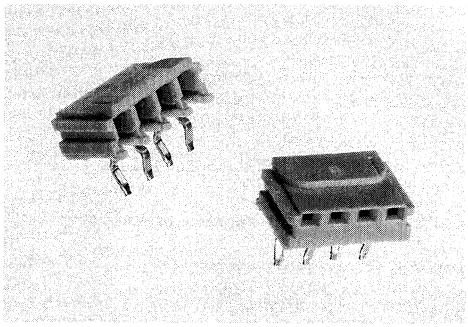
L

2.0mm .079" Center Board-to-Board System

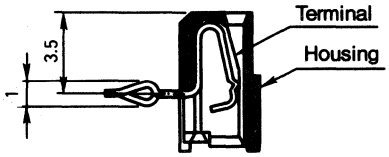
52257 Series
Right Angle Receptacle

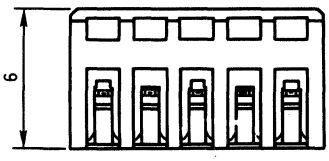
- Nylon 6/6, UL 94V-0
- Tin plated phosphor bronze terminals
- 3-20 circuits
- 125V, 1.5 amps max.
- Mates with 53178



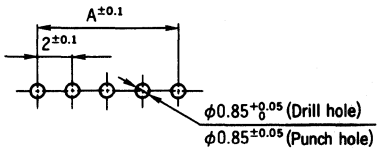


Note : All PCB tails are kinked.





PCB: t = 1.6



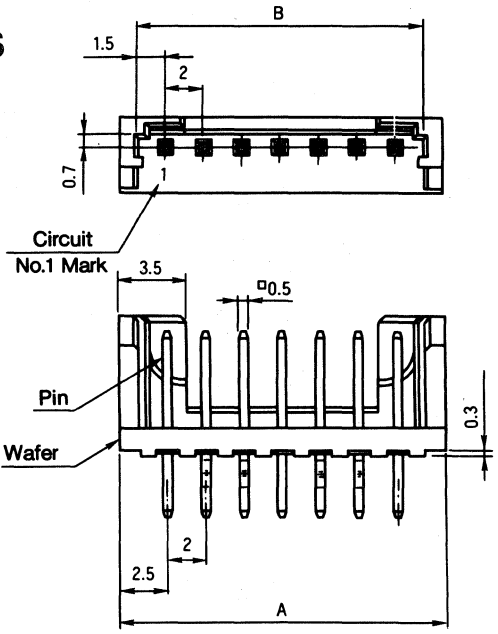
PCB Layout

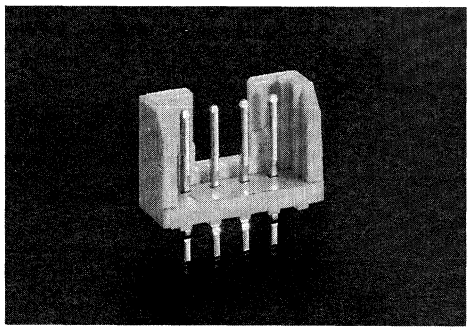
Ordering Information and Dimensions in mm

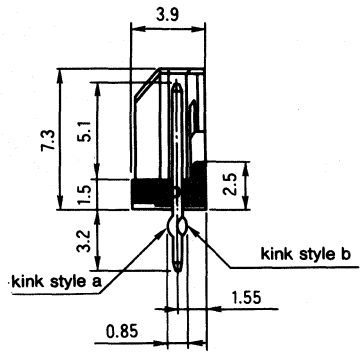
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
3	52257-0310	4.0	6.8	9	52257-0910	16.0	18.8
4	52257-0410	6.0	8.8	10	52257-1010	18.0	20.8
5	52257-0510	8.0	10.8	12	52257-1210	22.0	24.8
6	52257-0610	10.0	12.8	16	52257-1610	30.0	32.8
7	52257-0710	12.0	14.8	20	52257-2010	38.0	40.8
8	52257-0810	14.0	16.8				

53178 Series
Straight Header

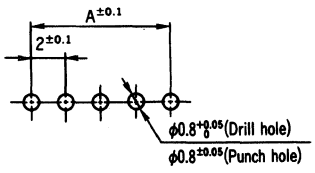
- Nylon 6/6, UL 96, UL 94V-0
- Tin plated brass pins
- 3-20 circuits
- Mates with 52257







PCB: t = 1.6



PCB Layout

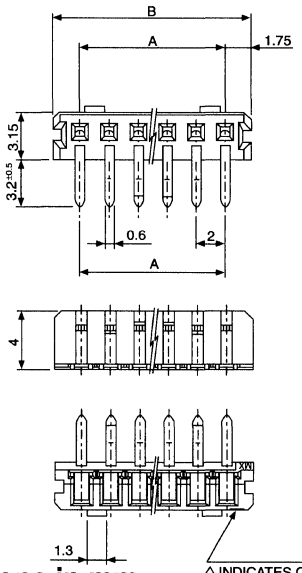
Ordering Information and Dimensions in mm

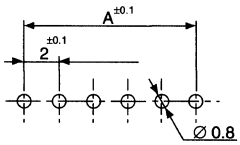
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
3	53178-0310	9.0	7.0	9	53178-0910	21.0	19.0
4	53178-0410	11.0	9.0	10	53178-1010	23.0	21.0
5	53178-0510	13.0	11.0	12	53178-1210	27.0	25.0
6	53178-0610	15.0	13.0	16	53178-1610	35.0	33.0
7	53178-0710	17.0	15.0	20	53178-2010	43.0	41.0
8	53178-0810	19.0	17.0				

2.0mm .079" Center Board-to-Board System

52418 Series
Single Row Right Angle Receptacle

- Glass-filled polyester, UL 94V-0
- Tin plated phosphor bronze terminals
- 3-20 Circuits
- 125V, 1.5 amps max.
- Mates with 53290





PCB Layout

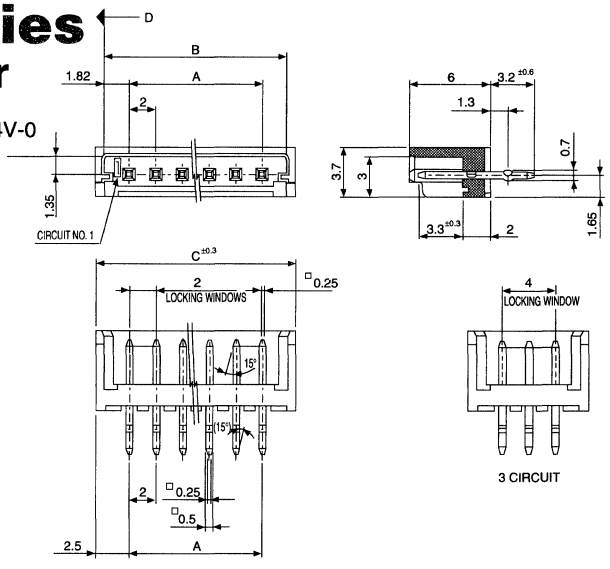
Ordering Information and Dimensions in mm

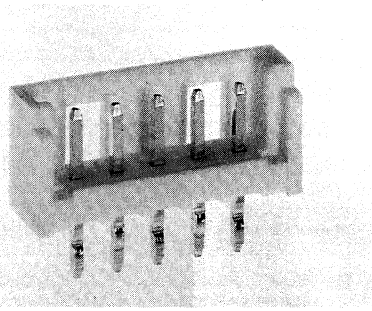
PCB thickness = 1.6mm

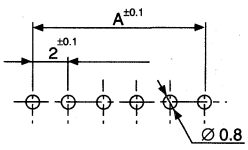
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
3	52418-0310	4.0	7.5	12	52418-1210	22.0	25.5
4	52418-0410	6.0	9.5	13	52418-1310	24.0	27.5
5	52418-0510	8.0	11.5	14	52418-1410	26.0	29.5
6	52418-0610	10.0	13.5	15	52418-1510	28.0	31.5
7	52418-0710	12.0	15.5	16	52418-1610	30.0	33.5
8	52418-0810	14.0	17.5	17	52418-1710	32.0	35.5
9	52418-0910	16.0	19.5	18	52418-1810	34.0	37.5
10	52418-1010	18.0	21.5	19	52418-1910	36.0	39.5
11	52418-1110	20.0	23.5	20	52418-2010	38.0	41.5

53290 Series
Straight Header

- Glass-filled polyester, UL 94V-0
- Tin plated brass pins
- 3-20 circuits
- Mates with 52418







PCB Layout

Ordering Information and Dimensions in mm

PCB thickness = 1.6mm

Circuits	Order No.	Dim. A	Dim. B	Dim. C	Circuits	Order No.	Dim. A	Dim. B	Dim. C
3	53290-0310	4.0	7.64	9.0	12	53290-1210	22.0	25.64	27.00
4	53290-0410	6.0	9.64	11.0	13	53290-1310	24.0	27.64	29.00
5	53290-0510	8.0	11.64	13.0	14	53290-1410	26.0	29.64	31.00
6	53290-0610	10.0	13.64	15.0	15	53290-1510	28.0	31.64	33.00
7	53290-0710	12.0	15.64	17.0	16	53290-1610	30.0	33.64	35.00
8	53290-0810	14.0	17.64	19.0	17	53290-1710	32.0	35.64	37.00
9	53290-0910	16.0	19.64	21.0	18	53290-1810	34.0	37.64	39.00
10	53290-1010	18.0	21.64	23.0	19	53290-1910	36.0	39.64	41.00
11	53290-1110	20.0	23.64	25.0	20	53290-2010	38.0	41.64	43.00

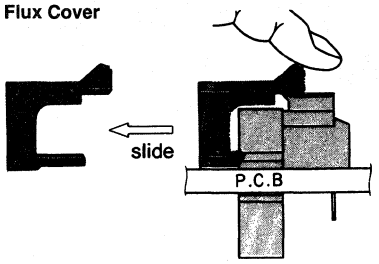
2.0mm .079" Board-to-Board "Floating" Bottom Entry System

Introduction

Molex's new "floating" board-to-board system is designed to make PCB assembly easier, faster and more economical.

With traditional board-to-board systems it is often difficult to achieve proper alignment in situations using several connectors. Molex's floating system combines specially-tapered lead-ins and strong blade pins with up to .039" 1.0 mm of tolerance in three areas (X, Y and Z axis) to help guide connectors and headers together.

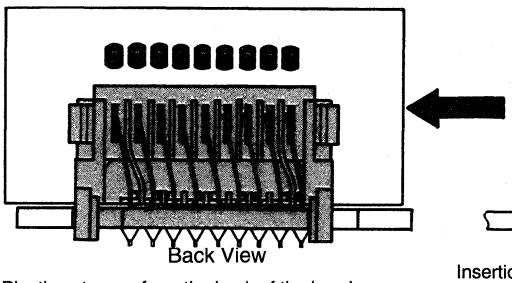
The system is ideally suited for robotic assembly, but also makes manual assembly easier.



The bottom-entry housing is provided with a plastic cover to protect the contact area during soldering.

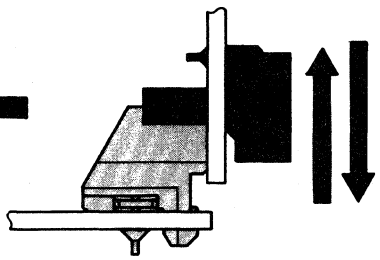
How The System Works

X-Axis (Side-to-Side)



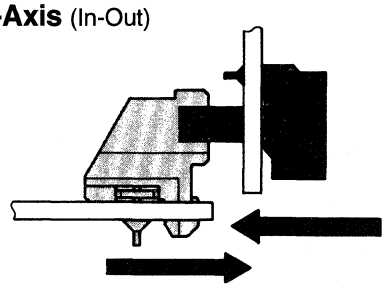
Plastic cut away from the back of the header enables the pins to move from side-to-side without effecting the solder joints. Mounting pegs in expanded slots enable the header itself to move back and forth as well.

Y-Axis (Up-Down)



Insertion is made easier by terminal slots that are longer than the blade-like pins. After assembly, the connector can be moved up and down .039" 1.0 mm.

Z-Axis (In-Out)



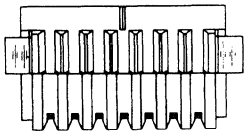
The 0.6 mm-length pins allow for secure contact with the connector either fully mated or up to .039" 1.0 mm apart.

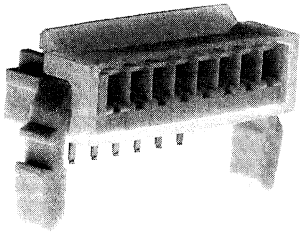
L

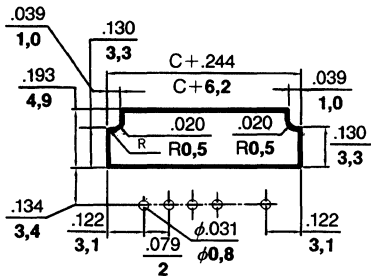
2.0mm .079" Board-to-Board "Floating" Bottom Entry System

52170 Series
Floating-type Housing

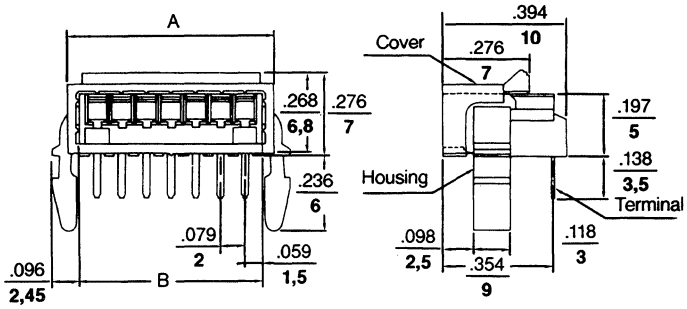
- Nylon, 6/6, UL 94 V-0
- Tin plated phosphor bronze terminals
- Cover: Nylon 6/6, UL 94 V-2
- 6-10 circuits
- Mates with 53114







PCB Layout

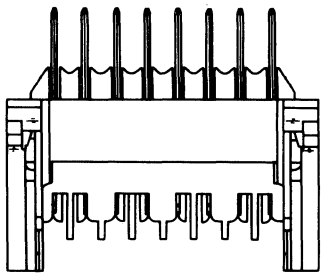


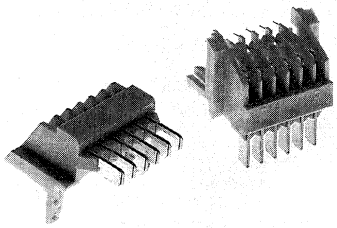
Ordering Information and Dimensions

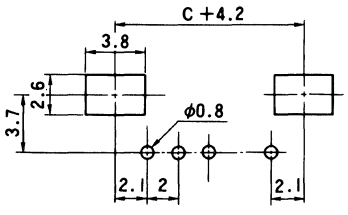
Circuits	Order No.	Dim. A	Dim. B	Dim. C	Circuits	Order No.	Dim. A	Dim. B	Dim. C
6	52170-0610	.587 **14,9**	.512 **13**	.394 **10**	9	52170-0910	.823 **20,9**	.748 **19**	.630 **16**
7	52170-0710	.665 **16,9**	.630 **16**	.472 **12**	10	52170-1010	.902 **22,9**	.787 **20**	.709 **18**
8	52170-0810	.744 **18,9**	.669 **17**	.551 **14**					

53114 Series
Floating-type Header

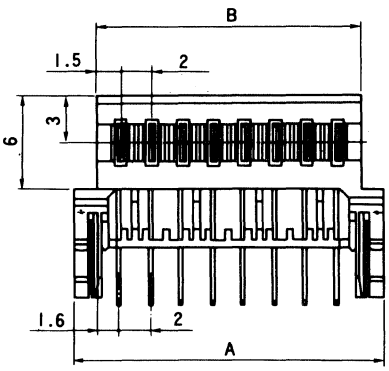
- Nylon 6/6, UL 94 V-0
- Tin plated phosphor bronze pins
- 6-10 circuits
- Mates with 52170

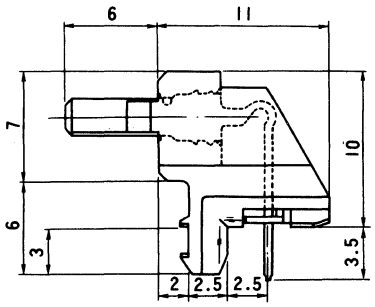






PCB Layout





Ordering Information and Dimensions in mm

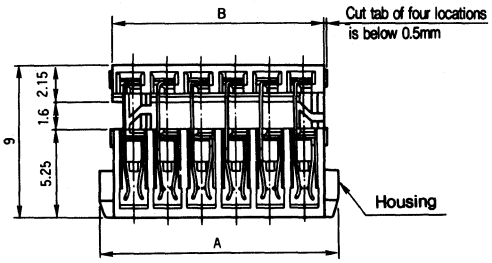
Circuits	Order No.	Dim. A	Dim. B	Dim. C	Circuits	Order No.	Dim. A	Dim. B	Dim. C
6	53114-0610	14.9	13	10	9	53114-0910	20.9	19	16
7	53114-0710	16.9	15	12	10	53114-1010	22.9	21	18
8	53114-0810	18.9	17	14					

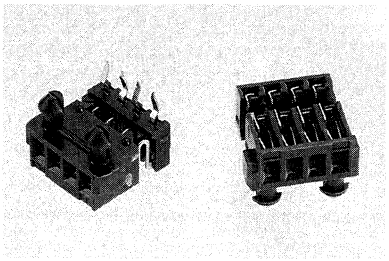
L

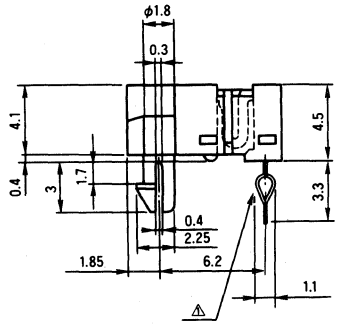
2.0mm .079" Center Floating Board-to-Board System

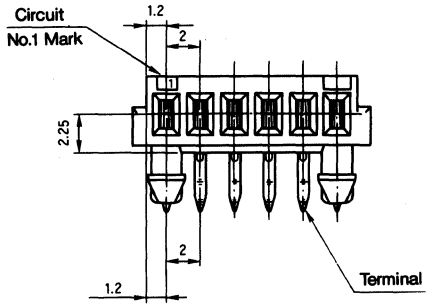
52330 Series
Right Angle Receptacle

- Nylon 6/6, UL 94V-0
- Tin plated phosphor bronze terminals
- 4-20 circuits
- Mates with 53244

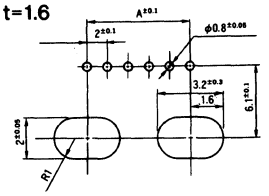








PCB: t=1.6



PCB Layout

Note: ⚠ All PC tails are kinked.

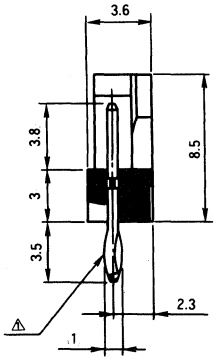
Ordering Information and Dimensions in mm

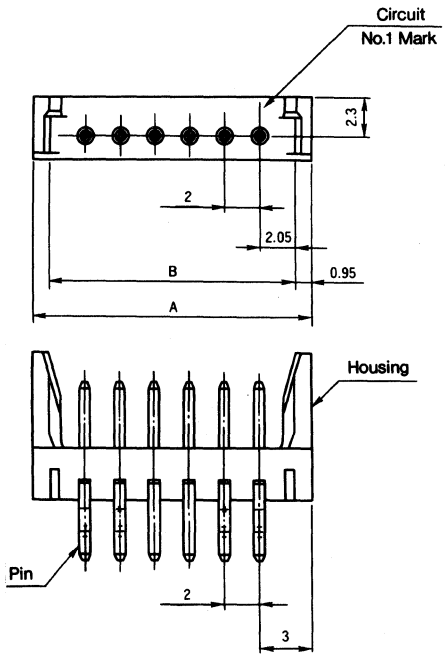
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
4	52330-0417	10.0	8.4	14	52330-1417	30.0	28.4
6	52330-0617	14.0	12.4	16	52330-1617	34.0	32.4
8	52330-0817	18.0	16.4	18	52330-1817	38.0	36.4
10	52330-1017	22.0	20.4	20	52330-2017	42.0	40.4
12	52330-1217	26.0	24.4				

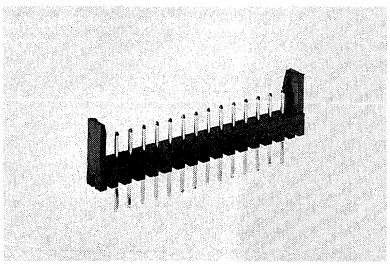
53244 Series
Straight Header

- Nylon 6/6, UL 94V-0
- Tin plated brass pins
- 4-20 circuits
- 125V, 1 amp max.
- Mates with 52330

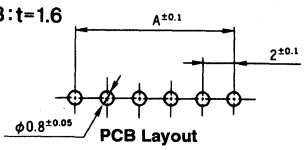
Note: ⚠ Two pins kinked on each end; for 20 circuit version kinked circuits are: 1, 2, 7, 8, 13, 14, 19 and 20.





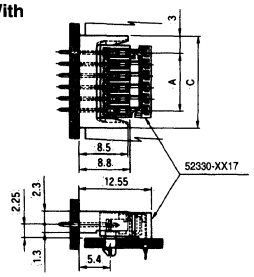


PCB: t=1.6



PCB Layout

Mating With



Ordering Information and Dimensions in mm

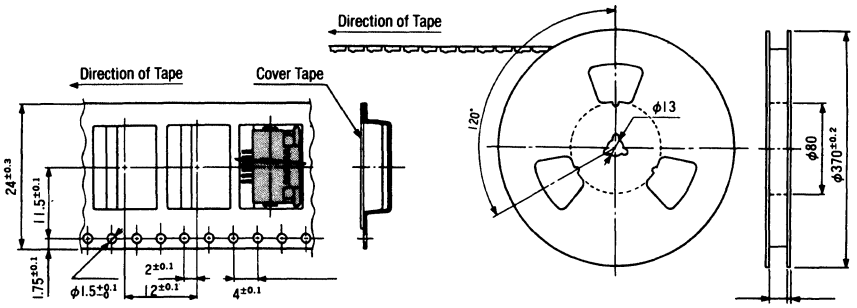
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
4	53244-0417	12.0	10.1	14	53244-1417	32.0	30.1
6	53244-0617	16.0	14.1	16	53244-1617	36.0	34.1
8	53244-0817	20.0	18.1	18	53244-1817	40.0	38.1
10	53244-1017	24.0	23.1	20	53244-2017	44.0	42.1
12	53244-1217	28.0	26.1				

Embossed Tape Packaging of SMT Connectors

Molex offers tape packaging for robotic insertion of a variety of our SMT connectors. Tape packaging eliminates handling and provides for automatic higher insertion speeds compared to conventional tray packaging and hand assembly.

The tape-packaging style for our 1.0mm surface mount FFC/FPC connector (shown right) meets EIAJ (Electronics Industry Association of Japan) standards for robotic vacuum insertion machines, the most common type of insertion equipment used world-wide for robotic placement of SMT components.

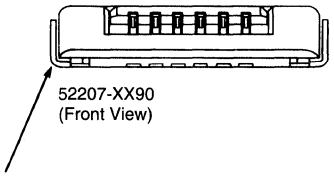
EIAJ Standard Reel Dimensions



*Note: EIAJ offers several standard reel dimensions. Above is most common size for our 1.0mm SMT connector.

1.0mm SMT Connector

Tape packaged 52207-XX90



52207-XX90
(Front View)

Metal tab only,
no nib required

Tray packaged version



Note: Contact factory for ordering information

Metal strain-relief (left) and locating nib (right)

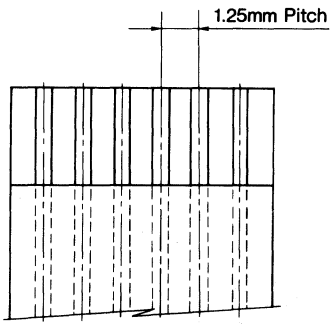
A Closer Look At FFC And FPC Cable

Molex's FFC/FPC connectors use thin, light cable that can accommodate ultra-fine pitch sizes. The type of cable used often varies depending on the pitch size and application.

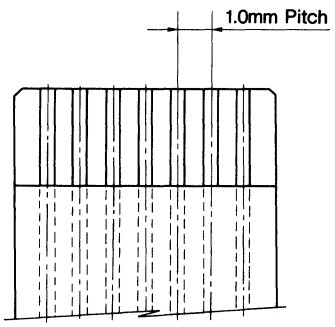
Our 1.25mm pitch connectors often use FFC (flat flexible cable). FFC is made of flat laminated copper wire. It is usually offered in 0.3mm thickness.

For 1.0mm pitch and below, FPC (flexible printed circuitry) is usually used. FPC is made of polyimide material and etched copper conductors. FPC can accept more severe tolerances than FFC and is also available in 0.3mm thick versions.

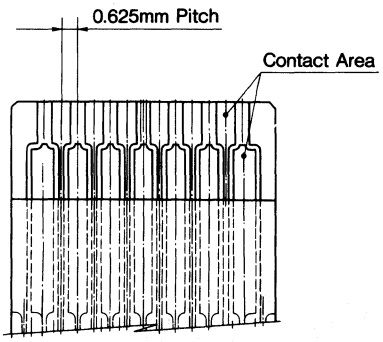
Our 0.625mm pitch FPC connectors utilize a staggered contact principle that allows for a wider conductor area on the cable and more reliable connection (see below diagram). This 0.625mm pitch cable is available in 0.2mm thickness.



1.25mm Pitch FFC



1.0mm Pitch FPC

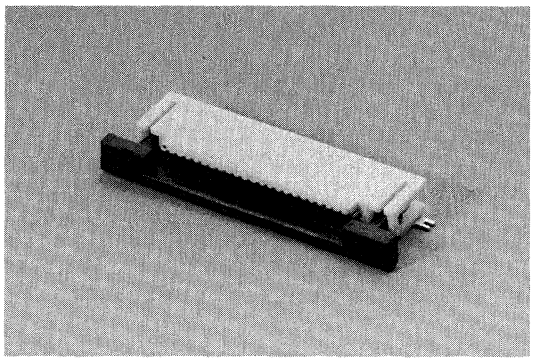


0.625mm Pitch FPC

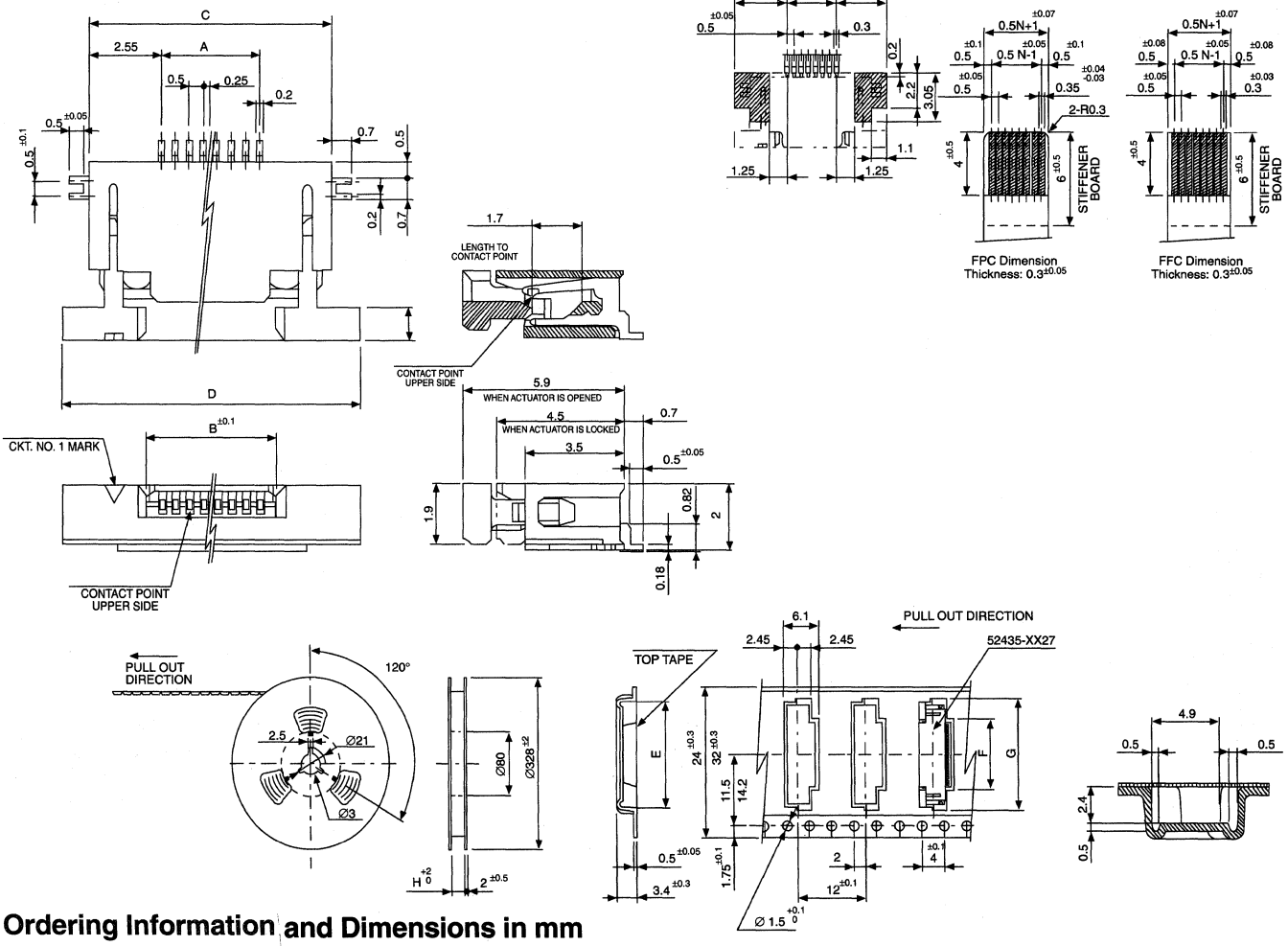
0.5mm .020" Center FPC Connector

52435 Series

SMT, ZIF Right Angle Top Contact Style



- Housing: nylon 4/6, UL 94V-0
- Actuator: PPS, UL 94V-0
- Tin plated phosphor bronze terminals
- Metal strain relief tabs
- 9-28 circuits
- For 0.3mm thick FPC
- Available in reel form only

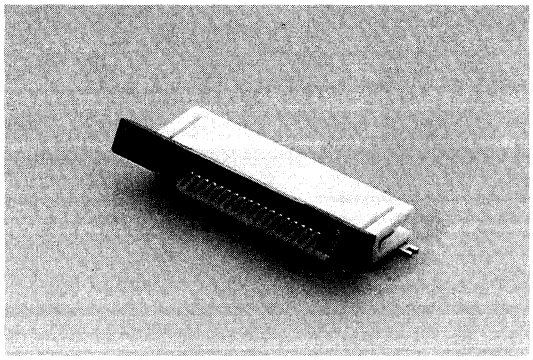


Ordering Information and Dimensions in mm

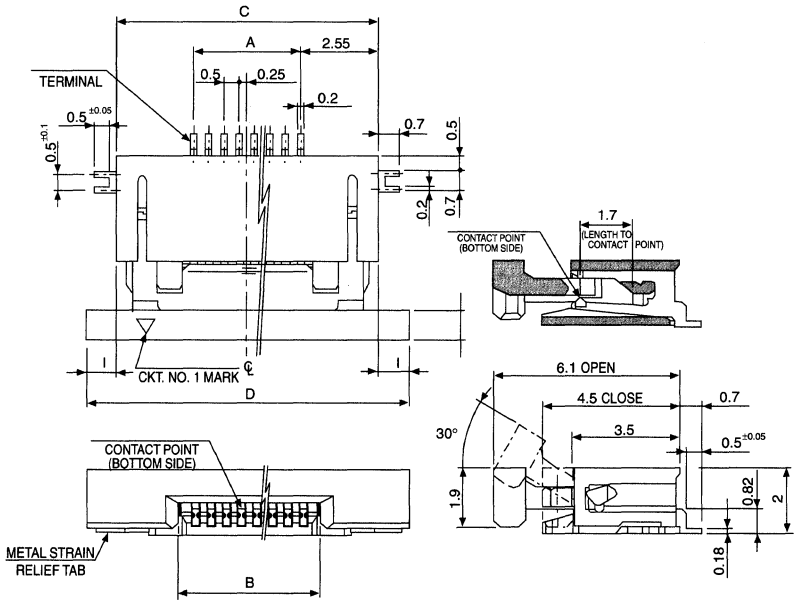
Circuits	Connector Only Order No.	Embossed Tape Pkg. Order No.	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G	Dim. H	Carrier Tape Width
9	52435-0927	52435-0991	4.0	5.15	9.1	11.1	11.4	5.8	12.4	24.4	24
10	52435-1027	52435-1091	4.5	5.65	9.6	11.6	11.9	6.3	12.9		
11	52435-1127	52435-1191	5.0	6.15	10.1	12.1	12.4	6.8	13.4		
12	52435-1227	52435-1291	5.5	6.65	10.6	12.6	12.9	7.3	13.9		
13	52435-1327	52435-1391	6.0	7.15	11.1	13.1	13.4	7.8	14.4		
14	52435-1427	52435-1491	6.5	7.65	11.6	13.6	13.9	8.3	14.9		
15	52435-1527	52435-1591	7.0	8.15	12.1	14.1	14.4	8.8	15.4		
16	52435-1627	52435-1691	7.5	8.65	12.6	14.6	14.9	9.3	15.9		
18	52435-1827	52435-1891	8.5	9.65	13.6	15.6	15.9	10.3	16.9		
20	52435-2027	52435-2091	9.5	10.65	14.6	16.6	16.9	11.3	17.9		
21	52435-2127	52435-2191	10.0	11.15	15.1	17.1	17.4	11.8	18.4		
27	52435-2727	52435-2791	13.0	14.15	18.1	20.1	20.4	14.8	21.4	32.4	32
28	52435-2827	52435-2891	13.5	14.65	18.6	20.6	20.9	15.3	21.9		

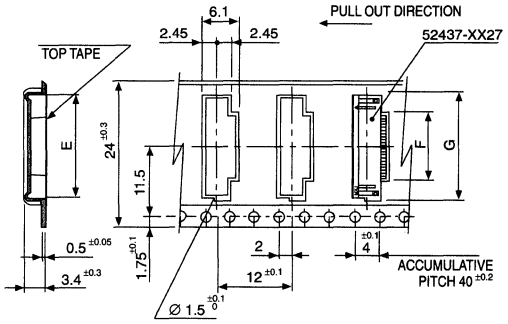
0.5mm .020" Center FPC Connector

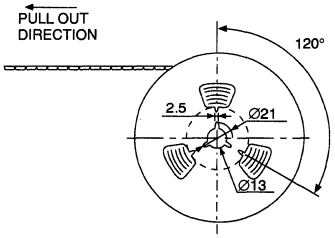
52437 Series
SMT, ZIF, Right Angle Bottom Contact Style

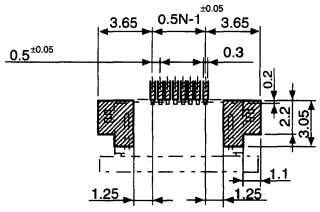


- Housing: nylon 4/6, UL 94V-0
- Actuator: PPS, UL 94V-0
- Tin plated phosphor bronze terminals
- Metal strain relief tabs
- 9-21 circuits
- For 0.3mm thick FPC
- Available in reel form only









PCB Layout

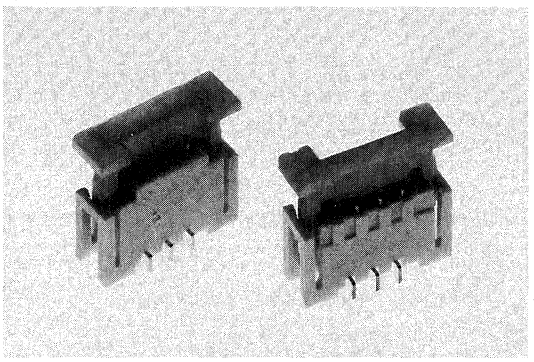
L

Ordering Information and Dimensions in mm

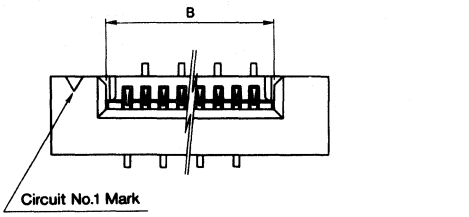
Circuits	Order No.	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G	Tape Width
9	52437-0991	4.0	5.15	9.1	11.1	11.4	5.8	12.4	24
10	52437-1091	4.5	5.65	9.6	11.6	11.9	6.3	12.9	
11	52437-1191	5.0	6.15	10.1	12.1	12.4	6.8	13.4	
12	52437-1291	5.5	6.65	10.6	12.6	12.9	7.3	13.9	
13	52437-1391	6.0	7.15	11.1	13.1	13.4	7.8	14.4	
14	52437-1491	6.5	7.65	11.6	13.6	13.9	8.3	14.9	
15	52437-1591	7.0	8.15	12.1	14.1	14.4	8.8	15.4	
16	52437-1691	7.5	8.65	12.6	14.6	14.9	9.3	15.9	
18	52437-1891	8.5	9.65	13.6	15.6	15.9	10.3	16.9	
20	52437-2091	9.5	10.65	14.6	16.6	16.9	11.3	17.9	
21	52437-2191	10.0	11.15	15.1	17.1	17.4	11.8	—	

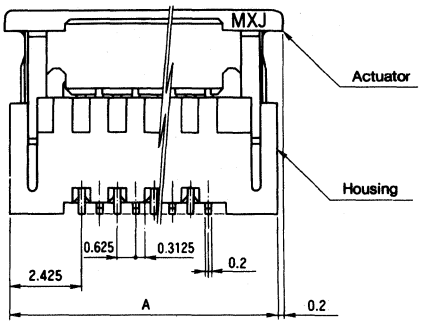
0.625mm .024" Center FPC Connector

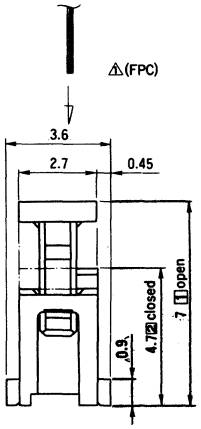
52205 Series
SMT, ZIF, Straight

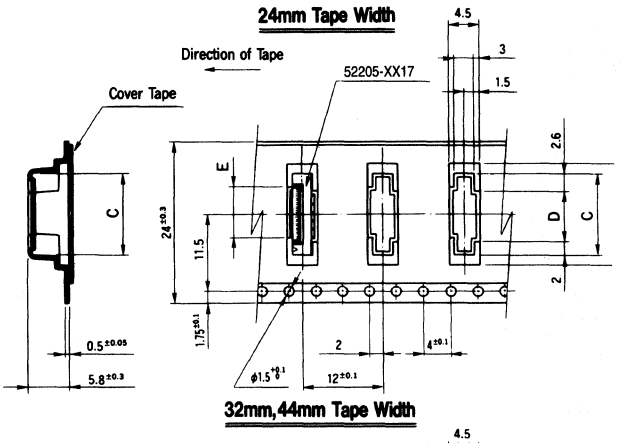


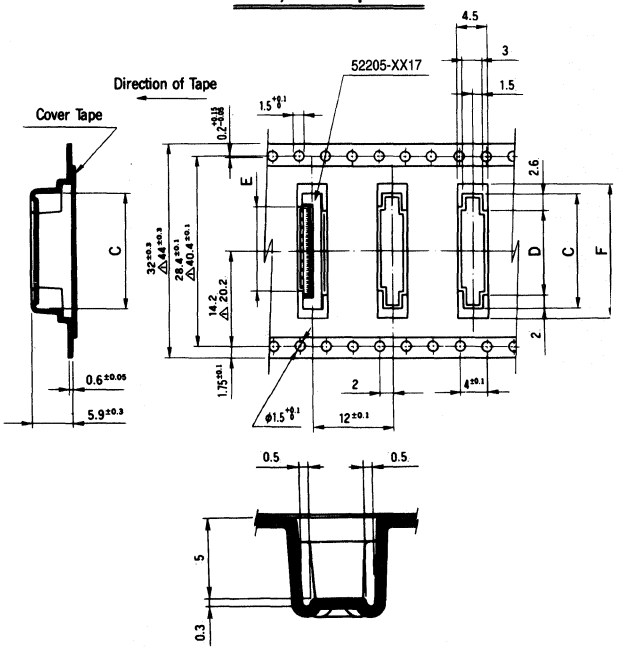
- Housing: nylon 4/6, UL 94V-0
- Actuator: PPS, UL 94V-0
- Tin plated phosphor bronze terminals
- 6-30 circuits
- 50V, 0.2 amp max.
- For 0.2mm thick FPC
- Available in reel form only

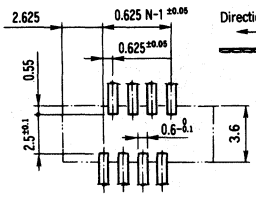




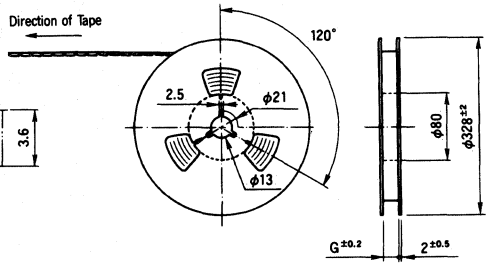








PCB Layout



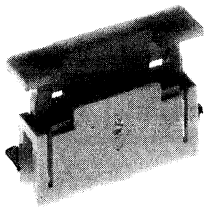
Ordering Information and Dimensions in mm

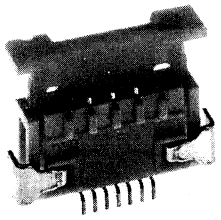
Circuits	Order No.	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G	Tape Width
6	52205-0690	7.9	4.5	8.3	3.7	3.7	11.3	24.4	24.0
8	52205-0890	9.2	5.8	9.6	5.0	5.0	12.6		
12	52205-1290	11.7	8.3	12.1	7.5	7.5	15.1		
14	52205-1490	12.9	9.5	13.3	8.7	8.7	16.3		
15	52205-1590	13.6	10.2	14.0	10.0	10.0	17.0		
20	52205-2090	16.7	13.3	17.1	12.5	12.5	20.1	32.4	32.0
23	52205-2390	18.6	15.2	19.0	15.0	15.0	22.0		
26	52205-2690	20.4	17.0	20.8	16.2	16.2	23.8	44.4	44.0
30	52205-3090	22.9	19.5	23.3	18.7	18.7	26.3		

0.625mm .024" Center FPC Connector

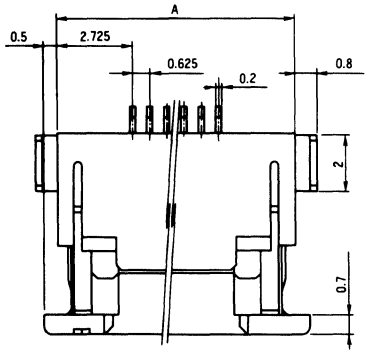
52204 Series

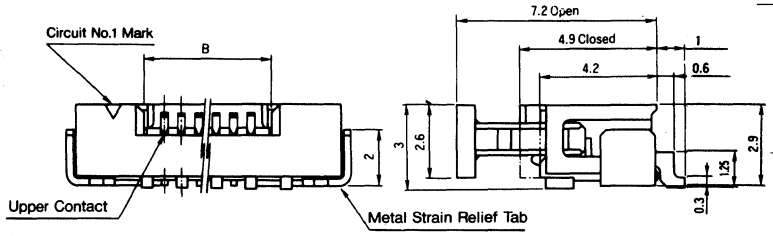
SMT, ZIF, Right Angle Top Contact Style

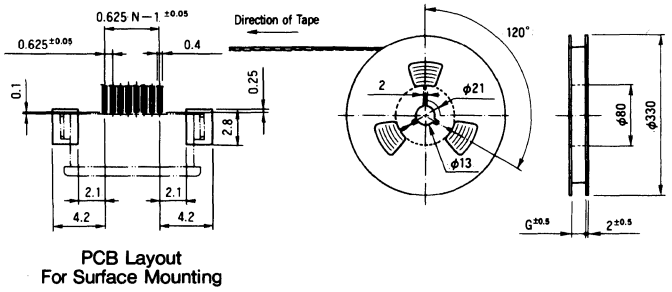




- Housing: nylon 4/6, UL 94V-0
- Actuator: PPS, UL 94V-0
- Tin plated phosphor bronze terminals
- 6-26 circuits
- 50V, 0.2 amp max.
- For 0.2mm thick FPC
- Available in reel form only

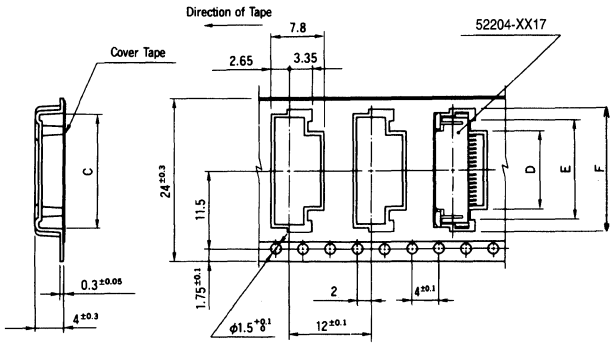




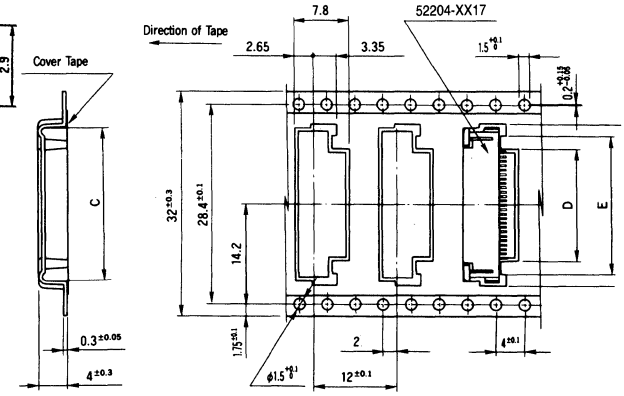


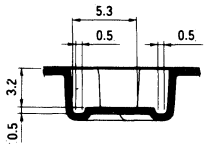
PCB Layout
For Surface Mounting

24mm Tape Width



32mm Tape Width





Ordering Information and Dimensions in mm

Circuits	Order No.	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G	Tape Width
6	52204-0690	8.575	4.575	9.85	4.55	7.85	11.15	26.0	24.0
7	52204-0790	9.200	5.200	10.50	5.20	8.50	11.80		
9	52204-0990	10.450	6.450	11.75	6.45	9.75	13.05		
13	52204-1390	12.950	8.950	14.25	8.95	12.25	15.55		
14	52204-1490	13.575	9.575	14.85	9.55	12.85	16.15		
15	52204-1590	14.200	10.200	15.50	10.20	13.50	16.80		
17	52204-1790	15.450	11.450	16.75	11.45	14.75	18.05		
18	52204-1890	16.075	12.075	17.35	12.05	15.35	18.65	34.0	32.0
24	52204-2490	19.825	15.825	21.10	15.80	19.10	22.40		
25	52204-2590	20.450	16.450	21.75	16.45	19.75	23.05		
26	52204-2690	21.075	17.075	22.35	17.05	20.35	23.65		

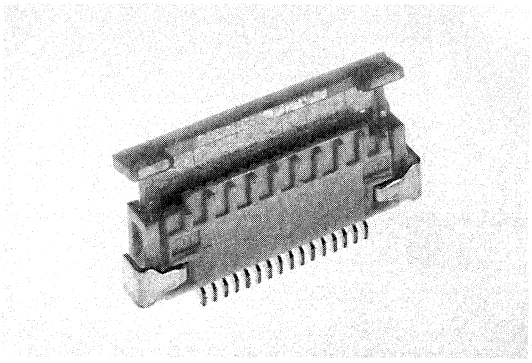
L

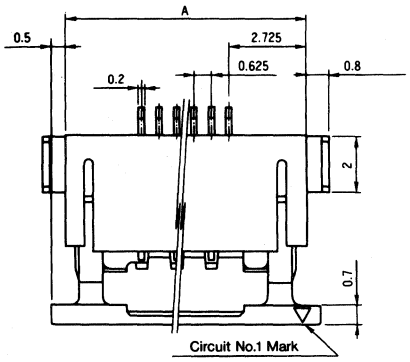
0.625mm .024" Center FPC Connector

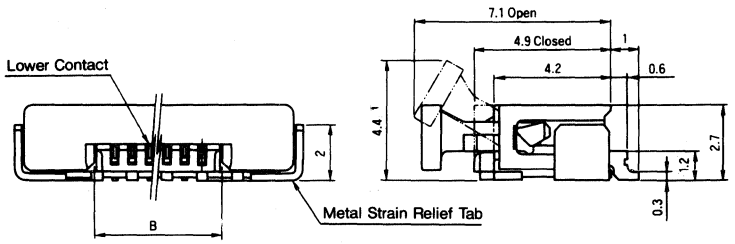
52396 Series

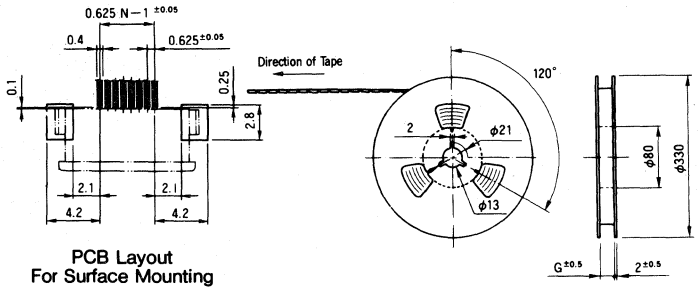
SMT, ZIF, Right Angle Bottom Contact Style

- Housing: nylon 4/6, UL 94V-0
- Actuator: PPS, UL 94V-0
- Tin plated phosphor bronze terminal
- Metal strain relief tabs
- 6-26 circuits
- 50V, 0.2 amp max.
- For 0.2mm thick FPC
- Available in reel form only



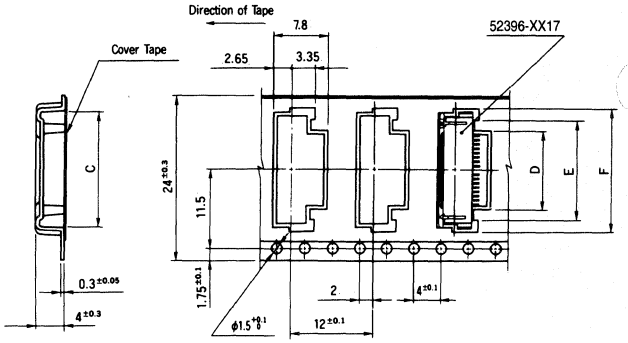




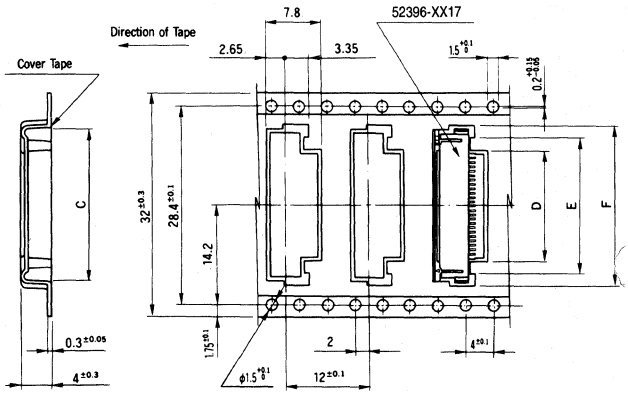


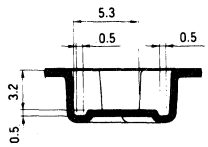
PCB Layout
For Surface Mounting

24mm Tape Width



32mm Tape Width





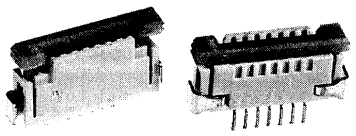
Ordering Information and Dimensions in mm

Circuits	Order No.	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G	Tape Width
6	52396-0690	8.575	4.575	9.85	4.55	7.85	11.15	26.0	24.0
7	52396-0790	9.200	5.200	10.50	5.20	8.50	11.80		
9	52396-0990	10.450	6.450	11.75	6.45	9.75	13.05		
13	52396-1390	12.950	8.950	14.25	8.95	12.25	15.55		
14	52396-1490	13.575	9.575	14.85	9.55	12.85	16.15		
15	52396-1590	14.200	10.200	15.50	10.20	13.50	16.80		
17	52396-1790	15.450	11.450	16.75	11.45	14.75	18.05		
18	52396-1890	16.075	12.075	17.35	12.05	15.35	18.65	34.0	32.0
24	52396-2490	19.825	15.825	21.10	15.80	19.10	22.40		
25	52396-2590	20.450	16.450	21.75	16.45	19.75	23.05		
26	52396-2690	21.075	17.075	22.35	17.05	20.35	23.65		

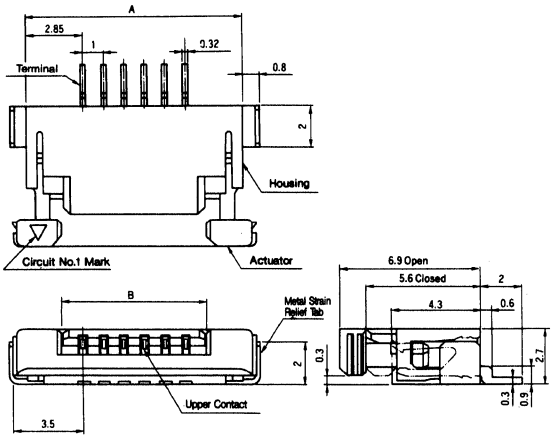
1.0mm .039" Center FFC/FPC Connector

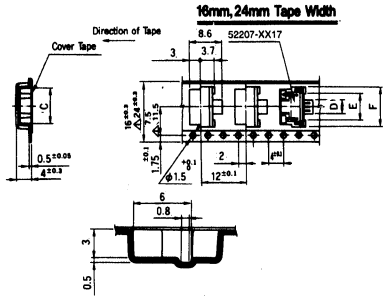
52207 Series

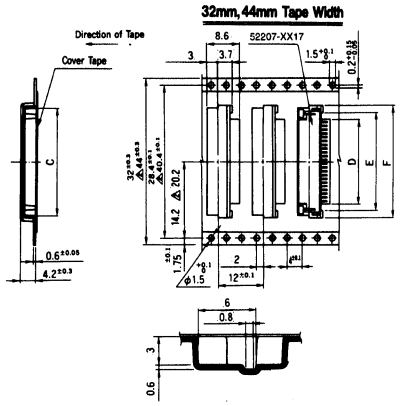
SMT, ZIF, Right Angle Top Contact Style

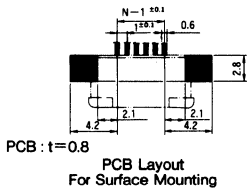


- Housing: nylon 4/6, UL 94V-0
- Actuator: PPS, UL 94V-0
- Tin plated phosphor bronze terminals
- Metal strain relief tabs
- 3-30 circuits
- 125V, 1 amp max.
- For 0.3mm thick FFC/FPC
- Available in reel form only

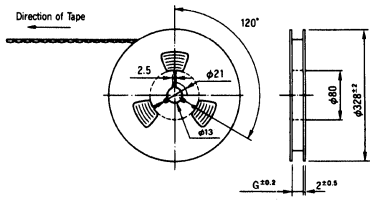








PCB Layout
For Surface Mounting



Ordering Information and Dimensions in mm

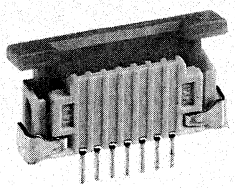
Circuits	Order No.	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G	Tape Width
3	52207-0390	7.7	4.2	9.30	3.7	7.0	10.5	16.4	16.0
4	52207-0490	8.7	5.2	10.30	4.7	8.0	11.5	24.4	24.0
5	52207-0590	9.7	6.2	11.30	5.7	9.0	12.5	24.4	24.0
6	52207-0690	10.7	7.2	12.30	6.7	10.0	13.5	24.4	24.0
7	52207-0790	11.7	8.2	13.30	7.7	11.0	14.5	24.4	24.0
8	52207-0890	12.7	9.2	14.30	8.7	12.0	15.5	24.4	24.0
9	52207-0990	13.7	10.2	15.30	9.7	13.0	16.5	24.4	24.0
10	52207-1090	14.7	11.2	16.30	10.7	14.0	17.5	24.4	24.0
11	52207-1190	15.7	12.2	17.30	11.7	15.0	18.5	24.4	24.0
12	52207-1290	16.7	13.2	18.35	12.7	16.0	19.5	32.4	32.0
13	52207-1390	17.7	14.2	19.35	13.7	17.0	20.5	32.4	32.0
14	52207-1490	18.7	15.2	20.35	14.7	18.0	21.5	32.4	32.0
15	52207-1590	19.7	16.2	21.35	15.7	19.0	22.5	32.4	32.0
16	52207-1690	20.7	17.2	22.35	16.7	20.0	23.5	32.4	32.0
17	52207-1790	21.7	18.2	23.35	17.7	21.0	24.5	44.4	44.0
18	52207-1890	22.7	19.2	24.35	18.7	22.0	25.5	44.4	44.0
19	52207-1990	23.7	20.2	25.35	19.7	23.0	26.5	44.4	44.0
20	52207-2090	24.7	21.2	26.35	20.7	24.0	27.5	44.4	44.0
21	52207-2190	25.7	22.2	27.35	21.7	25.0	28.5	44.4	44.0
22	52207-2290	26.7	23.2	28.35	22.7	26.0	29.5	44.4	44.0
23	52207-2390	27.7	24.2	29.35	23.7	27.0	30.5	44.4	44.0
24	52207-2490	28.7	25.2	30.35	24.7	28.0	31.5	44.4	44.0
25	52207-2590	29.7	26.2	31.35	25.7	29.0	32.5	44.4	44.0
26	52207-2690	30.7	27.2	32.35	26.7	30.0	33.5	44.4	44.0
27	52207-2790	31.7	28.2	33.35	27.7	31.0	34.5	56.4	56.0
28	52207-2890	32.7	29.2	34.35	28.7	32.0	35.5	56.4	56.0
30	52207-3090	34.7	31.2	36.35	30.7	34.0	37.5	56.4	56.0

L

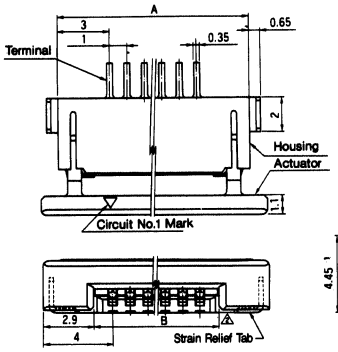
1.0mm .039" Center FFC/FPC Connector

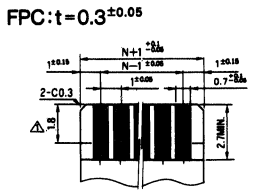
52271 Series

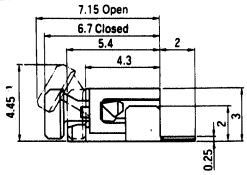
SMT, ZIF, Right Angle Bottom Contact Style

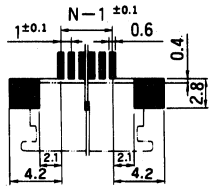


- Housing: nylon 4/6, UL 94V-0
- Actuator: PPS, UL 94V-0
- Tin plated phosphor bronze terminals
- Metal strain relief tabs
- 50V, 0.5 amp max.
- 6-30 circuits
- For 0.3mm FFC/FPC
- Available in reel form only

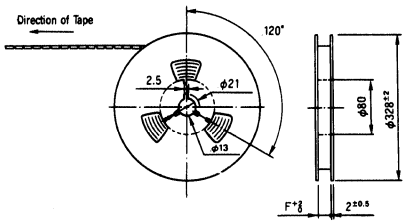


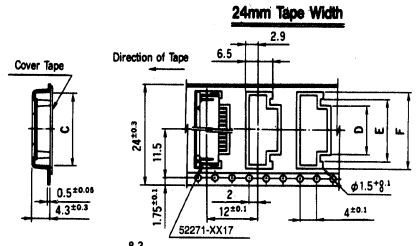


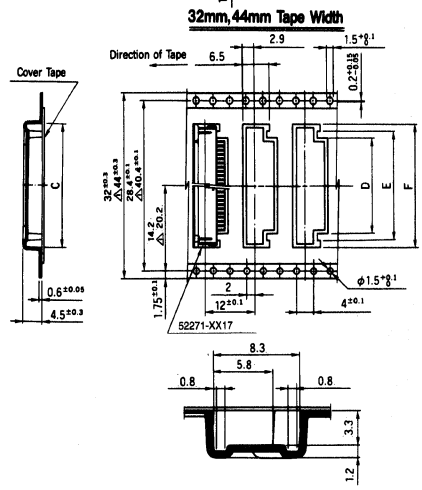




PCB Layout
For Surface Mounting







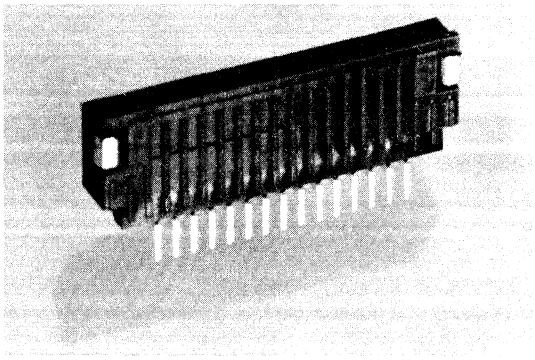
L

Ordering Information and Dimensions in mm

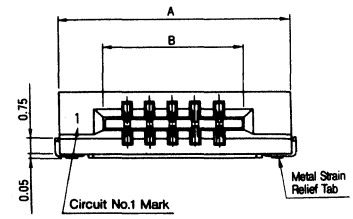
Circuits	Order No.	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Tape Width
6	52271-0690	11.0	7.2	13.30	6.4	10.0	24.4	24.0
7	52271-0790	12.0	8.2	14.30	7.4	11.0	24.4	24.0
8	52271-0890	13.0	9.2	15.30	8.4	12.0	24.4	24.0
9	52271-0990	14.0	10.2	16.30	9.4	13.0	24.4	24.0
10	52271-1090	15.0	11.2	17.30	10.4	14.0	24.4	24.0
11	52271-1190	16.0	12.2	18.30	11.4	15.0	24.4	24.0
12	52271-1290	17.0	13.2	19.35	12.4	16.0	32.4	32.0
13	52271-1390	18.0	14.2	20.35	13.4	17.0	32.4	32.0
14	52271-1490	19.0	15.2	21.35	14.4	18.0	32.4	32.0
15	52271-1590	20.0	16.2	22.35	15.4	19.0	32.4	32.0
16	52271-1690	21.0	17.2	23.35	16.4	20.0	32.4	32.0
17	52271-1790	22.0	18.2	24.35	17.4	21.0	44.4	44.0
18	52271-1890	23.0	19.2	25.35	18.4	22.0	44.4	44.0
19	52271-1990	24.0	20.2	26.35	19.4	23.0	44.4	44.0
20	52271-2090	25.0	21.2	27.35	20.4	24.0	44.4	44.0
22	52271-2290	27.0	23.2	29.35	22.4	26.0	44.4	44.0
23	52271-2390	28.0	24.2	30.35	23.4	27.0	44.4	44.0
24	52271-2490	29.0	25.2	31.35	24.4	28.0	44.4	44.0
25	52271-2590	30.0	26.2	32.35	25.4	29.0	44.4	44.0
26	52271-2690	31.0	27.2	33.35	26.4	30.0	44.4	44.0
27	52271-2790	32.0	28.2	34.35	27.4	31.0	44.4	44.0
28	52271-2890	33.0	29.2	35.35	28.4	32.0	56.4	56.0
30	52271-3090	35.0	31.2	37.35	30.4	34.0	56.4	56.0

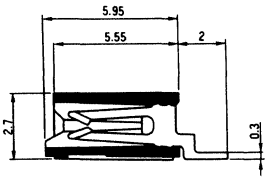
1.0mm .039" Center FFC/FPC Connector

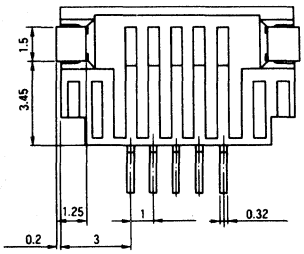
52085 Series
Non-ZIF with SMT Leads

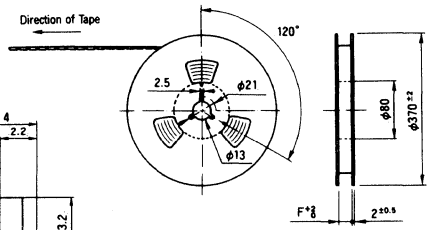


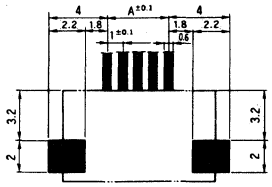
- Nylon 6/6, UL 94V-0
- Tin plated phosphor bronze terminals
- Metal strain relief tabs
- 4-15 circuits
- 50V, 0.5 amp max.
- For 0.3mm thick FFC/FPC
- Available in reel form only





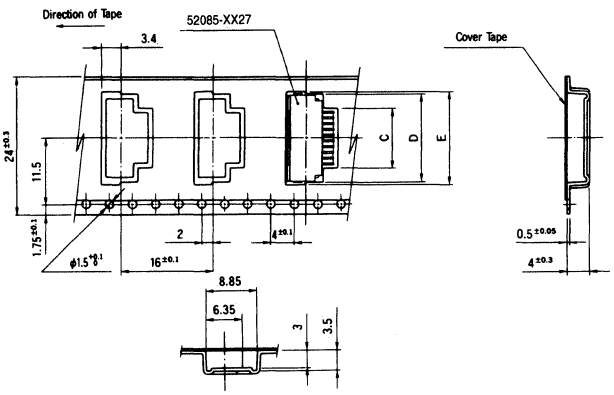




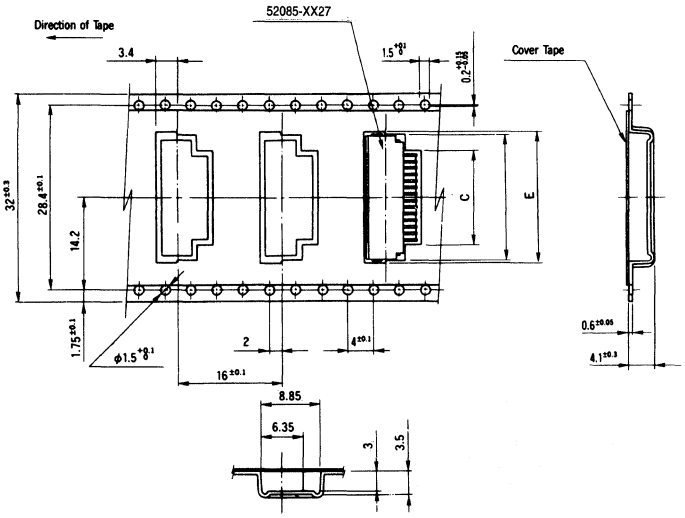


PCB Layout
For Surface Mounting

24mm Tape Width



32mm Tape Width



Ordering Information and Dimensions in mm

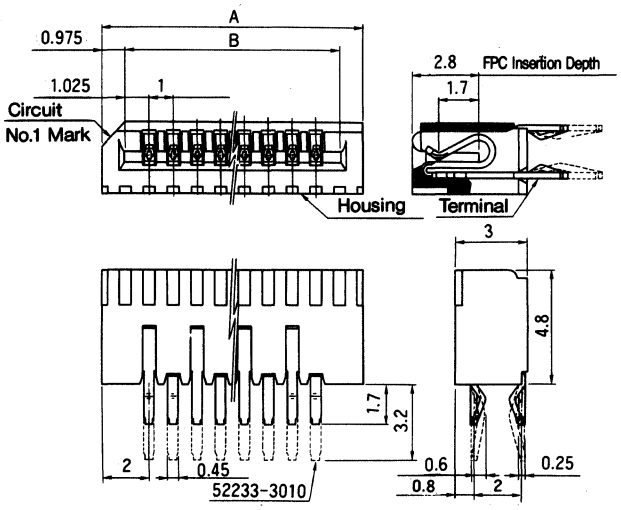
Circuits	Order No.	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Tape Width
4	52085-0480	9.0	5.15	4.4	9.3	10.2	24.4	24.0
5	52085-0580	10.0	6.15	5.4	10.3	11.2		
6	52085-0680	11.0	7.15	6.4	11.3	12.2		
7	52085-0780	12.0	8.15	7.4	12.3	13.2		
8	52085-0880	13.0	9.15	8.4	13.3	14.2		
9	52085-0980	14.0	10.15	9.4	14.3	15.2		
10	52085-1080	15.0	11.15	10.4	15.3	16.2		
11	52085-1180	16.0	12.15	11.4	16.3	17.2		
12	52085-1280	17.0	13.15	12.4	17.3	18.2		
13	52085-1380	18.0	14.15	13.4	18.3	19.2	32.4	32.0
14	52085-1480	19.0	15.15	14.4	19.3	20.2		
15	52085-1580	20.0	16.15	15.4	20.3	21.2		

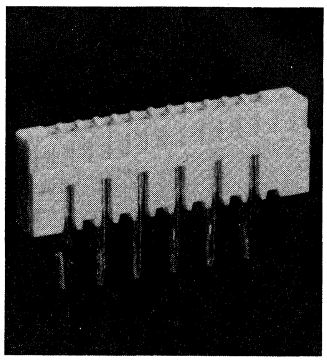
L

1.0mm .039" Center FFC/FPC Connector

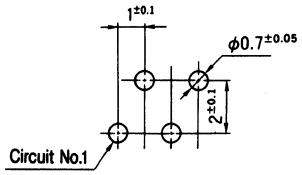
52233 Series
Non-ZIF, Straight

- Nylon 6/6, UL 94V-0
- Tin plated phosphor bronze terminals
- 4-20 circuits
- 50V, 0.5 amp max.
- For 0.3mm thick FFC/FPC
- Available in tray packages





PCB Layout

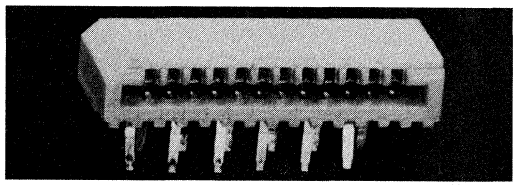


Ordering Information and Dimensions in mm

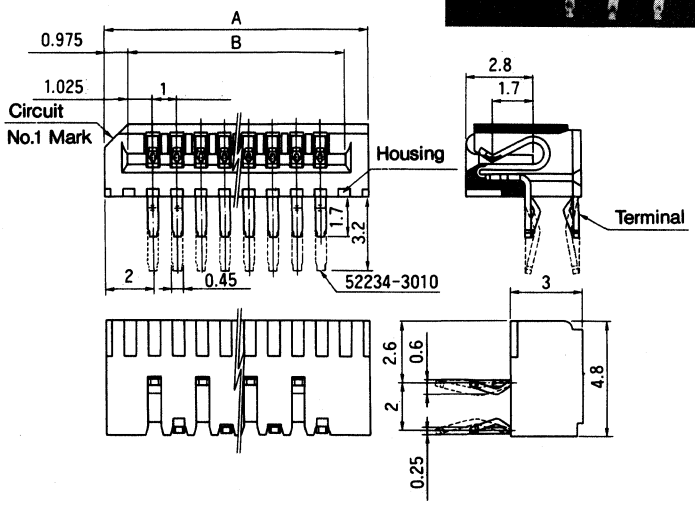
✻ All circuit sizes have kinked outer PC tails

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
4	52233-0410	7.0	5.05	14	52233-1410	17.0	15.05
6	52233-0610	9.0	7.05	16	52233-1610	19.0	17.05
8	52233-0810	11.0	9.05	18	52233-1810	21.0	19.05
10	52233-1010	13.0	11.05	20	52233-2010	23.0	21.05
12	52233-1210	15.0	13.05				

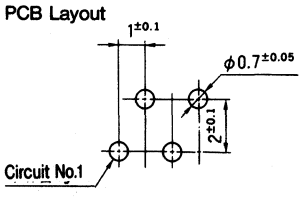
52234 Series
Non-ZIF, Right Angle



- Nylon 6/6, UL 94V-0
- Tin plated phosphor bronze terminals
- 4-20 circuits
- 50V, 0.5 amp max.
- For 0.3mm thick FFC/FPC
- Available in tray packages



PCB Layout



Ordering Information and Dimensions in mm

✻ All circuit sizes have kinked outer PC tails

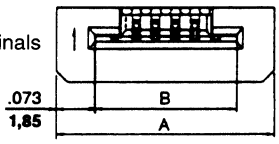
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
4	52234-0410	7.0	5.05	14	52234-1410	17.0	15.05
6	52234-0610	9.0	7.05	16	52234-1610	19.0	17.05
8	52234-0810	11.0	9.05	18	52234-1810	21.0	19.05
10	52234-1010	13.0	11.05	20	52234-2010	23.0	21.05
12	52234-1210	15.0	13.05				

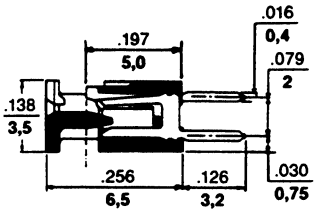
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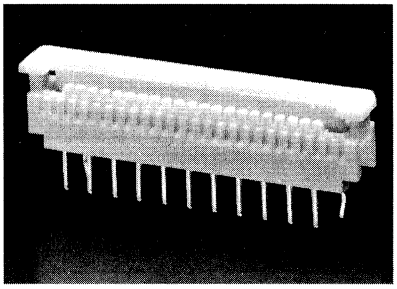
1.0mm .039" Center FFC/FPC Connector

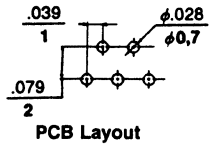
52030 Series
ZIF, Straight

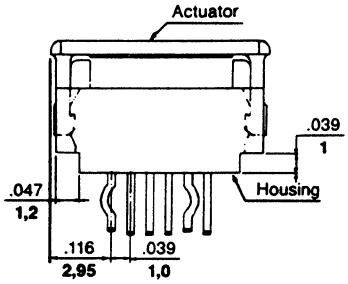
- Housing: nylon 6/6, UL 94V-0
- Actuator: PPS, UL 94V-0
- Tin plated phosphor bronze terminals
- 4-30 circuits
- 50V, 0.5 amp max.
- For 0.3mm thick FFC/FPC

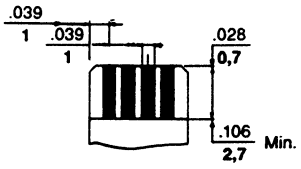












Dimensions

Circuits	Dim. A		Dim. B		Circuits	Dim. A		Dim. B	
4	.366	9,3	.205	5,2	18	.917	23,3	.756	19,2
6	.445	11,3	.283	7,2	20	.996	25,3	.834	21,2
8	.524	13,3	.362	9,2	22	1.074	27,3	.913	23,2
10	.602	15,3	.441	11,2	24	1.154	29,3	.992	25,2
12	.681	17,3	.520	13,2	26	1.232	31,3	1.070	27,2
14	.760	19,3	.598	15,2	28	1.311	33,3	1.150	29,2
16	.839	21,3	.677	17,2	30	1.390	35,3	1.228	31,2

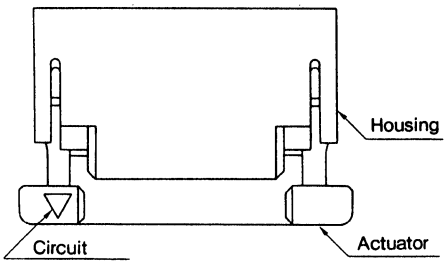
inch
mm

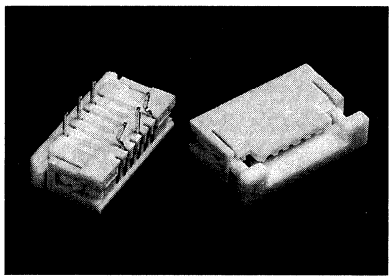
Ordering Information

Order No. - 52030-XX10
Replace "XX" with circuits 04-30 (even numbers only)

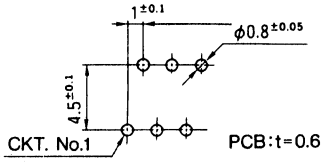
52089 Series
ZIF, Right Angle Top Contact Style (Low Profile)

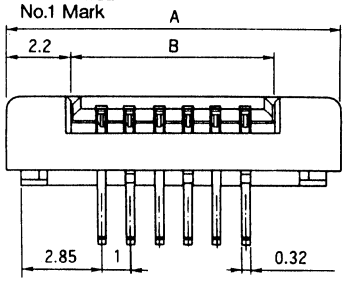
- Housing: nylon 6/6, UL 94V-0
- Actuator: polyester UL 94V-0
- Tin plated phosphor bronze terminals
- 4-30 circuits
- 50V, 0.5 amp max.
- For 0.3mm thick FFC/FPC

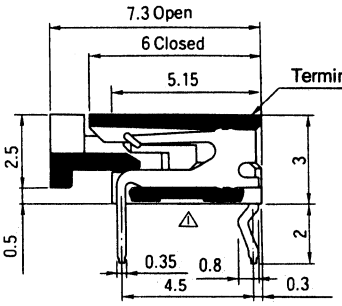


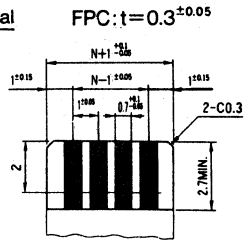


PCB Layout









Dimensions in mm

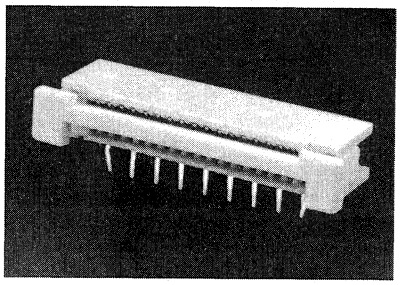
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	9.6	5.2	13	18.6	14.2	22	27.6	23.2
5	10.6	6.2	14	19.6	15.2	23	28.6	24.2
6	11.6	7.2	15	20.6	16.2	24	29.6	25.2
7	12.6	8.2	16	21.6	17.2	25	30.6	26.2
8	13.6	9.2	17	22.6	18.2	26	31.6	27.2
9	14.6	10.2	18	23.6	19.2	27	32.6	28.2
10	15.6	11.2	19	24.6	20.2	28	33.6	29.2
11	16.6	12.2	20	25.6	21.2	29	34.6	30.2
12	17.6	13.2	21	26.6	22.2	30	35.6	31.2

Ordering Information

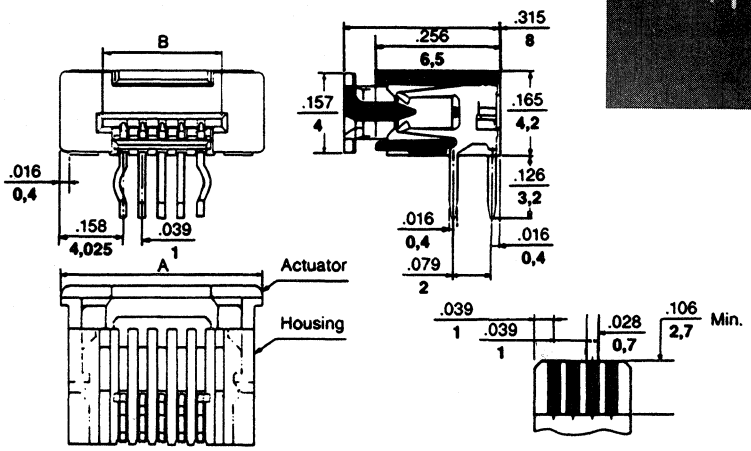
Order No. - 52089-XX10
Replace "XX" with number of circuits required, 04-30

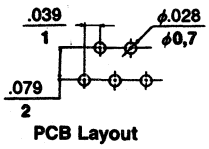
1.0mm .039" Center FFC/FPC Connector

52043 Series
ZIF, Right Angle Bottom Contact Style



- Housing: nylon 6/6, UL 94V-0
- Actuator: PPS, UL 94V-0
- Tin plated phosphor bronze terminals
- 4-20 circuits
- 50V, 0.5 amp max.
- For 0.3mm thick FFC/FPC





PCB Layout

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.435 **11,05**	.205 **5,2**	10	.671 **17,05**	.441 **11,2**	14	.829 **21,05**	.598 **15,2**	18	.986 **25,05**	.756 **19,2**
6	.514 **13,05**	.283 **7,2**	12	.750 **19,05**	.520 **13,2**	16	.907 **23,05**	.677 **17,2**	20	1.065 **27,05**	.834 **21,2**
8	.593 **15,05**	.362 **9,2**									

Ordering Information

Order No. - 52043-**XX**10
Replace **"XX"** with circuits 04-20 (even numbers only)

L

PBT Plastics-An Introduction

Molex connectors are often made of either nylon or polyester. The polyester used is polybutylene terephthalate (PBT), a thermoplastic crystalline polymer.

PBT offers a number of special performance characteristics that have led to recent widespread applications for connectors and other components used in the electrical and electronics industries.

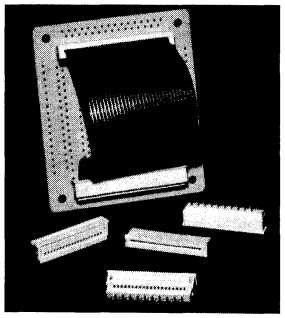
Six main features of PBT:

- High resistance to trichloroethane and other solvents and oils.
- High formability with less shrinkage than most other crystalline polymers. The result is greater dimensional accuracy.
- Excellent rigidity and mechanical strength.
- High heat stability. The addition of glass fibers and other reinforcing materials can raise the heat resistance to over 200°C. Even without reinforcing agents, PBT components can withstand temperatures of up to 150°C without deformation.
- Good electrical properties.
- Noncombustibility. Flame retardants may be added without seriously impairing performance, and special treatment can then prevent retardant bleedout. This is a phenomenon that can lead to corrosion of metal parts in the vicinity.

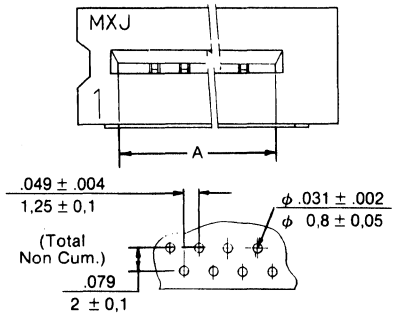
1.25mm .049" Center ZIF Connectors for FFC/FPC

5597 / 5598 Series
ZIF, Straight

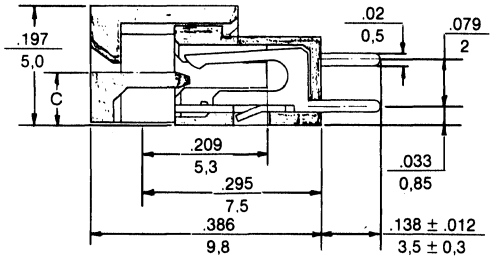
- Housing: polyester UL 94V-0
- Tin plated phosphor bronze terminals
- 3-30 circuits
- Staggered solder tails, 3,5mm .138" long
- 5597 accommodates FFC/FPC 0,3mm .012" thick
- 5598 accommodates FFC/FPC 0,1mm .004" thick



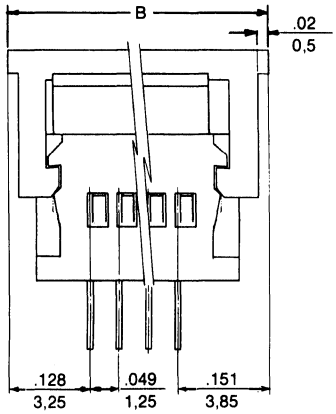
Dimensions

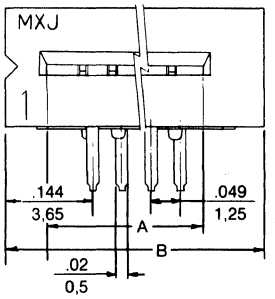


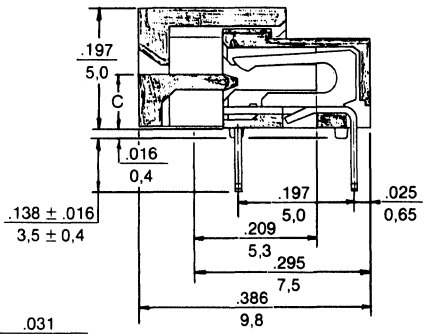
PCB Layout

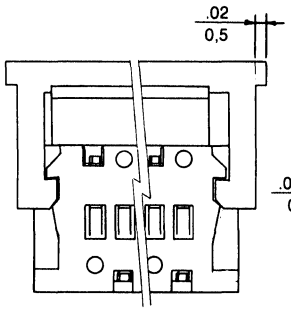


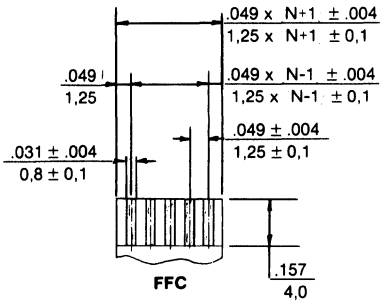
Straight Tail Version
5597-NCPB
5598-NCPB

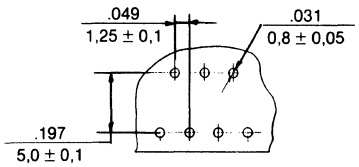












PCB Layout

inches
mm

Right Angle Version
5597-NAPB
5598-NAPB

	Recommended FFC	Dim. C
5598	0,3mm .012" thick	2,3mm .091"
5598	0,1mm .004" thick	2,5mm .098"

Dimensions 5597/5598

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
3	.205 5,2	.378 9,6	10	.549 13,95	.722 18,35	17	.894 22,7	1.067 27,1	24	1.238 31,45	1.411 35,85
4	.254 6,45	.427 10,85	11	.598 15,2	.772 19,6	18	.943 23,95	1.116 28,35	25	1.287 32,7	1.461 37,1
5	.303 7,7	.476 12,1	12	.648 16,45	.821 20,85	19	.992 25,2	1.165 29,6	26	1.337 33,95	1.510 38,35
6	.352 8,95	.526 13,35	13	.697 17,7	.870 22,1	20	1.041 26,45	1.214 30,85	27	1.386 35,2	1.559 39,6
7	.401 10,2	.574 14,6	14	.746 18,95	.919 23,35	21	1.090 27,7	1.264 32,1	28	1.435 36,45	1.609 40,85
8	.451 11,45	.624 15,85	15	.795 20,2	.968 24,6	22	1.140 28,95	1.313 33,35	29	1.484 37,7	1.657 42,1
9	.500 12,7	.673 17,1	16	.845 21,45	.978 25,85	23	1.189 30,2	1.362 34,6	30	1.534 38,95	1.707 43,35

L

1.25mm .049" Center ZIF Connectors for FFC/FPC

Specifications

Electrical:

Voltage Rating — 200V (ac/dc)

Current Rating — 1 amp (ac/dc)

Contact Resistance — 20 milliohms max.

Insulation Resistance — 500 megohms min.

Dielectric Strength — 500 Vac

Mechanical:

Max. Actuator Insertion and Extraction Force

Newtons — (23.5 + 1.5 X ckt)

Lbs. — (5.3 + 0.33 X ckt)

Kg. — (2.4 + 0.15 X ckt)

FCC/FPC Retention Force — (over 10 circuits)

Newtons — (1.5 + 0.5 X ckt)

Lbs. — (0.33 + 0.11 X ckt)

Kg. — (0.15 + 0.05 X ckt)

(Up to and including 10 circuits)

Newtons — (3.9 + 0.5 X ckt)

Lbs. — (0.88 + 0.11 X ckt)

Kg. — (0.4 + 0.05 X ckt)

Terminal Retention Force

Newtons — 5.9

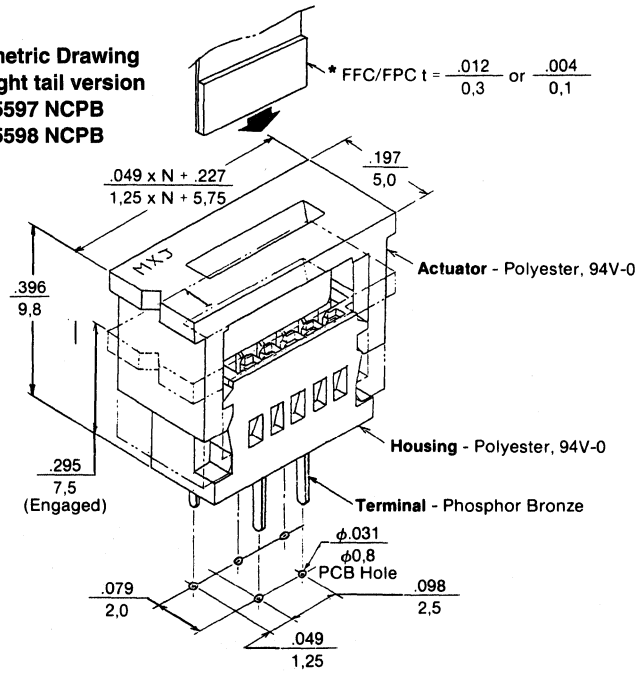
Lbs. — 1.3

Kg. — 0.6

Environmental:

Ambient Temperature Range — -40°C - 105°C

Isometric Drawing
straight tail version
5597 NCPB
5598 NCPB



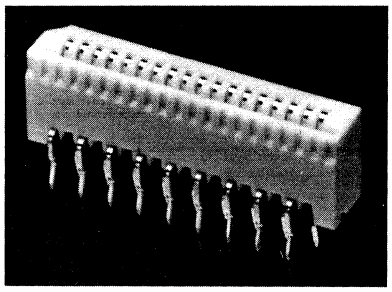
L

Ordering Information 5598/5598

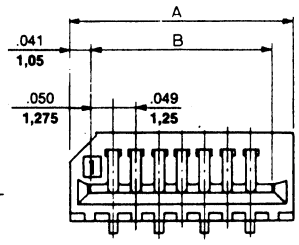
5597 For 0,3mm .012" Thick FFC/FPC		5598 For 0,1mm .004" Thick FFC/FPC	
Straight Tail Version	**Right Angle Tail Version**	**Straight Tail Version**	**Right Angle Tail Version**
39-51-3**XX**4	39-51-3**XX**3	39-51-4**XX**2	39-51-4**XX**1
Replace "**XX**" in Order No. with circuit size required, 03-30			

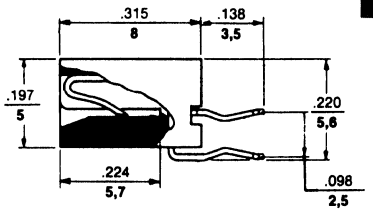
1.25mm .049" Center FFC/FPC Connector

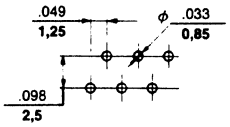
52045 Series
Non-ZIF, Straight



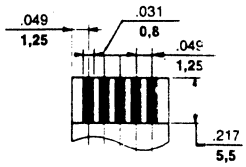
- Housing: polyester UL 94V-0
- Tin plated phosphor bronze terminals
- 200V, 1 amp max.
- 3-40 circuits
- For 0.3mm thick FFC/FPC







PCB Layout

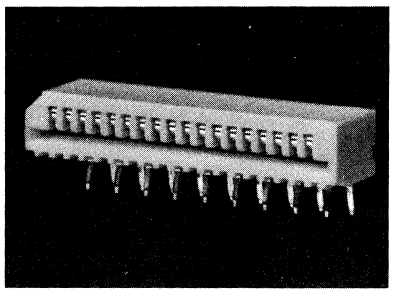


Inch / mm

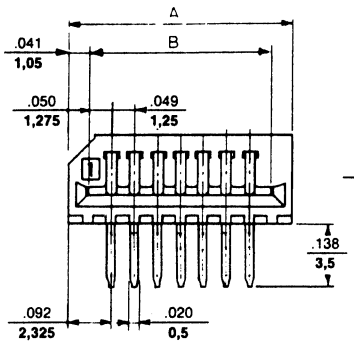
Ordering Information

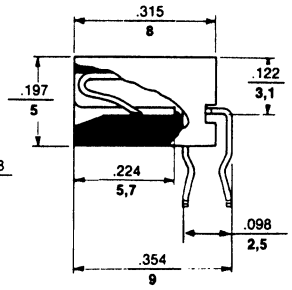
Order No. - 52045-**XX**10
Replace **XX** in Order No. with circuit size required, 03-40

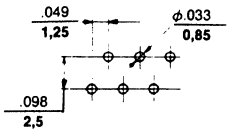
52044 Series
Non-ZIF, Right Angle



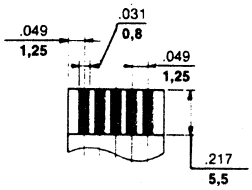
- Housing: polyester UL 94V-0
- Tin plated phosphor bronze terminals
- 200V, 1 amp max.
- 3-40 circuits
- For 0.3mm thick FFC/FPC







PCB Layout



Inch / mm

Ordering Information

Order No. - 52044-**XX**10
Replace **XX** in Order No. with circuit size required, 03-40

L

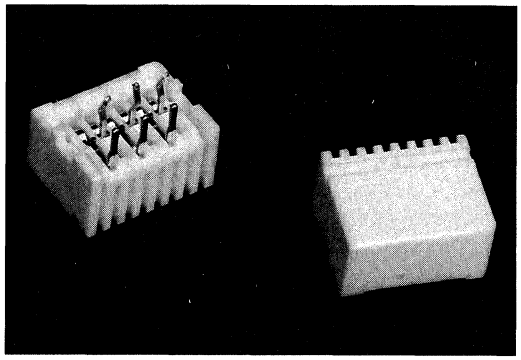
Dimensions 52044/52045

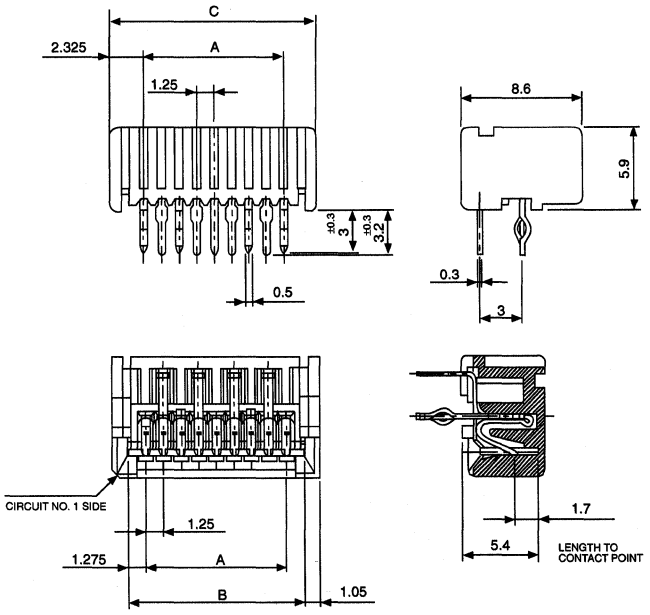
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
3	.281 **7,15**	.199 **5,05**	13	.774 **19,65**	.691 **17,55**	23	1.266 **32,15**	1.183 **30,05**	32	1.709 **43,40**	1.626 **41,30**
4	.331 **8,40**	.248 **6,30**	14	.823 **20,90**	.740 **18,80**	24	1.314 **33,40**	1.232 **31,30**	33	1.758 **44,65**	1.675 **42,55**
5	.380 **9,65**	.297 **7,55**	15	.872 **22,15**	.789 **20,05**	25	1.364 **34,65**	1.281 **32,55**	34	1.807 **45,90**	1.724 **43,80**
6	.429 **10,90**	.346 **8,80**	16	.921 **23,40**	.839 **21,30**	26	1.413 **35,90**	1.331 **33,80**	35	1.856 **47,15**	1.774 **45,06**
7	.478 **12,15**	.396 **10,05**	17	.970 **24,65**	.888 **22,55**	27	1.463 **37,15**	1.380 **35,05**	36	1.906 **48,40**	1.822 **46,30**
8	.528 **13,40**	.445 **11,30**	18	1.020 **25,90**	.937 **23,80**	28	1.512 **38,40**	1.429 **36,30**	37	1.955 **49,65**	1.872 **47,55**
9	.577 **14,65**	.494 **12,55**	19	1.069 **27,15**	.986 **25,05**	29	1.561 **39,65**	1.478 **37,55**	38	2.004 **50,90**	1.921 **48,80**
10	.626 **15,90**	.543 **13,80**	20	1.118 **28,40**	1.035 **26,30**	30	1.610 **40,90**	1.528 **38,80**	39	2.053 **52,15**	1.970 **50,05**
11	.675 **17,15**	.593 **15,05**	21	1.167 **29,65**	1.085 **27,55**	31	1.659 **42,15**	1.577 **40,05**	40	2.102 **53,40**	2.019 **51,30**
12	.724 **18,40**	.642 **16,30**	22	1.217 **30,90**	1.134 **28,80**						

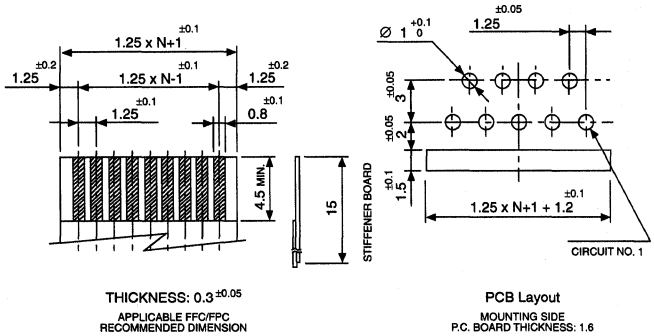
1.25mm .049" Center FFC/FPC Connector

52492 Series
Bottom Entry

- Housing: PBTP, UL 94V-0
- Tin plated phosphor bronze terminals
- 7-23 circuits
- For 0.3mm thick FFC/FPC







L

Ordering Information and Dimensions in mm

Circuits	Order No.	Dim. A	Dim. B	Dim. C
7	52492-0720	7.5	10.05	12.15
9	52492-0920	10.0	12.55	14.65
11	52492-1120	12.5	15.05	17.15
13	52492-1320	15.0	17.55	19.65
15	52492-1520	17.5	20.55	22.15
17	52492-1720	20.0	22.55	24.65
19	52492-1920	22.5	25.05	27.15
21	52492-2120	25.0	27.55	29.65
23	52492-2320	27.5	30.05	32.15

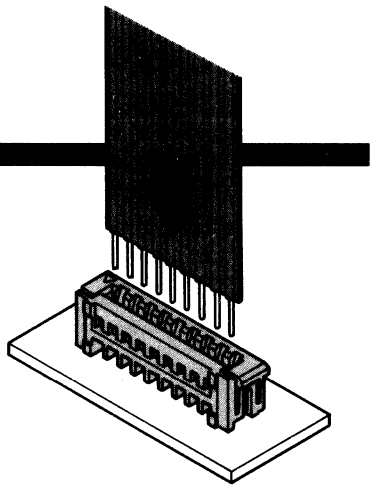
Wire Trap Connectors

Introduction

Molex Wire Trap connectors minimize your harness assembly costs and provide secure cable retention for multiple cycles. We offer two types of Wire Traps: Our standard push-cover version (52004, 52007 & 52008) and a new low-profile pull-cover version (52328, 52147, 52151).

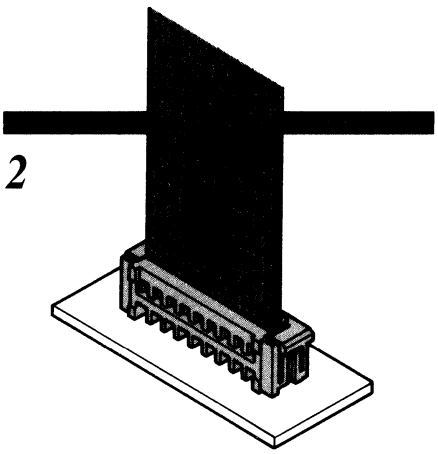
Pull-Cover Style
(52328/52147/52151 Series)

1



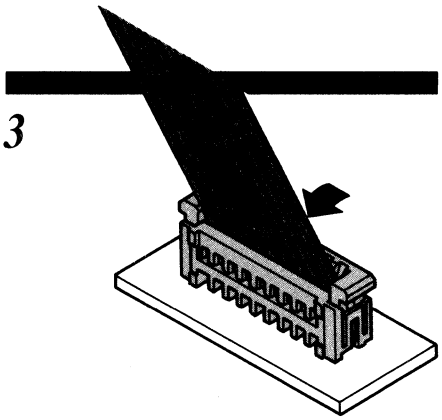
With the cover in the down position, insert the trimmed cable end into the connector.

2



The spring force of the terminals holds the cable leads securely in place.

3

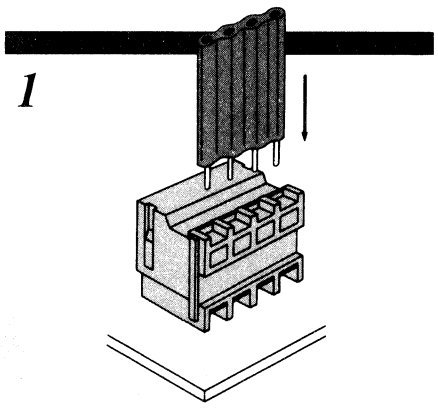


To release the cable, first lift the cover, pulling up on both sides. For minimum extraction force, pull the cable out at a 45° angle. Push cover back into down position before inserting cable again.

L

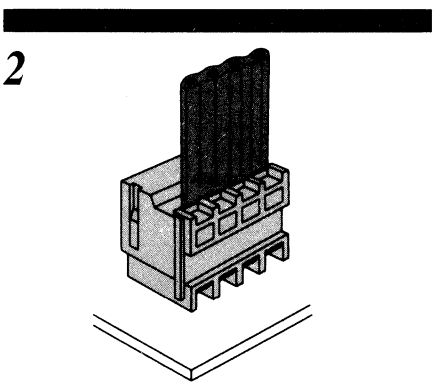
Push-Cover Style
(52004/52007/52008 Series)

1



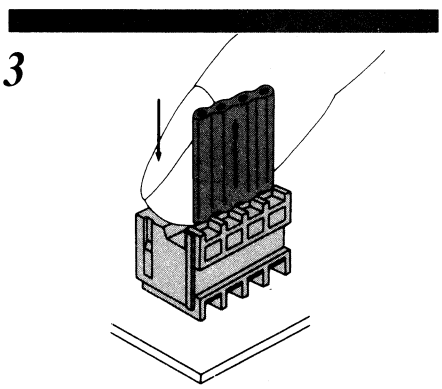
Insert the trimmed cable end into the connector.

2



The spring force of the connector terminals holds the cable leads securely in place (1 kg per circuit retention force).

3

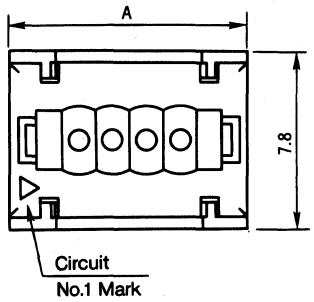


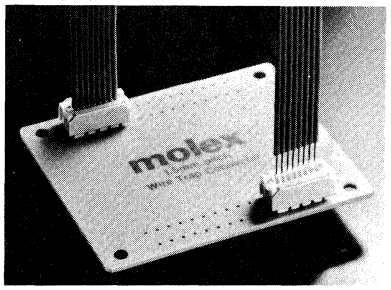
Press the cover of the connector and the cable lifts out easily. Pressing the connector can also facilitate insertion by minimizing the force required.

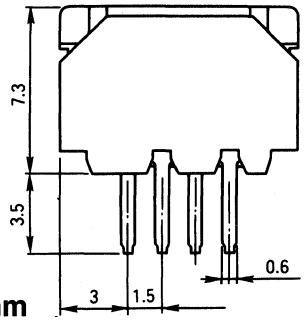
1.5mm .059" Center Wire Trap

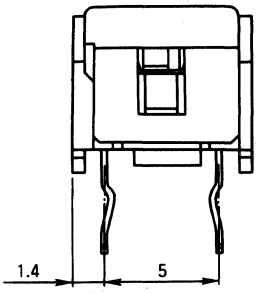
52004 Series
Push-Cover Style, Straight

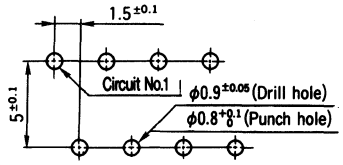
- Glass filled polyester, UL 94V-0
- Tin plated phosphor bronze terminal
- 3-12 circuits
- For topcoated ribbon cable
- Wire Range: AWG #24-#26
- Insulation diameter: 1.5mm max.
- Strip length: 7mm
- 150V, 2.5 amps max.











PCB:t=1.6

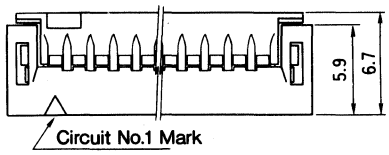
PCB Layout

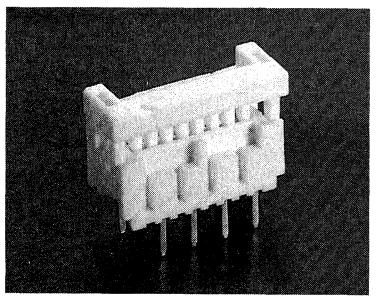
Ordering Information and Dimensions in mm

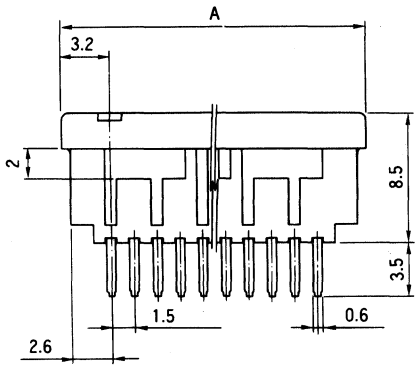
Circuits	Order No.	Dim. A	Circuits	Order No.	Dim. A
3	52004-0310	9.0	8	52004-0810	16.5
4	52004-0410	10.5	9	52004-0910	18.0
5	52004-0510	12.0	10	52004-1010	19.5
6	52004-0610	13.5	11	52004-1110	21.0
7	52004-0710	15.0	12	52004-1210	22.5

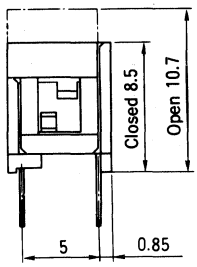
52328 Series
Pull-Cover Style, Straight

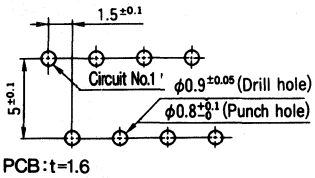
- Glass filled polyester, UL 94V-0
- Tin plated phosphor bronze terminal
- 13-18 circuits
- For topcoated ribbon cable
- Wire Range: AWG #26-#28
- Insulation diameter: 1.5mm max.
- Strip length: 7mm
- 150V, 1.5 amps max.











PCB:t=1.6

PCB Layout

Ordering Information and Dimensions in mm

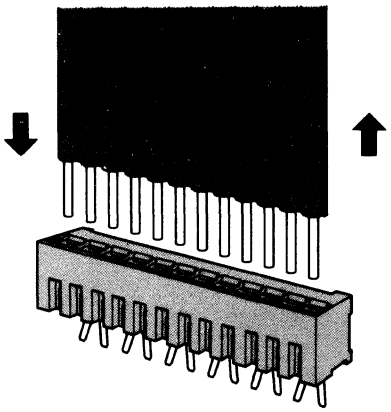
Circuits	Order No.	Dim. A	Circuits	Order No.	Dim. A
13	52328-1310	24.4	16	52328-1610	28.9
14	52328-1410	25.9	17	52328-1710	30.4
15	52328-1510	27.4	18	52328-1810	31.9

1.5mm .059" Center Jumper Sockets and Ribbon Cable Connectors

Jumper Sockets

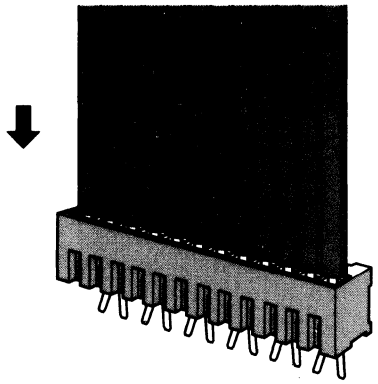
Molex Jumper Sockets provide a simple, one-step method of cable-to-board connection. They can be used together or with our Wire Trap or Cable Holder connectors. Our growing range of Jumper Sockets includes removable styles for several insertions and a fixed type for one-time termination. The fixed type is available in 2.0mm pitch only, while the removable style can be ordered in both 1.5 and 2.0mm pitch versions.

Removable-type
(52275/52273/52287/52288)



Cable can be easily inserted and removed.

Fixed-type
(52153/52154)



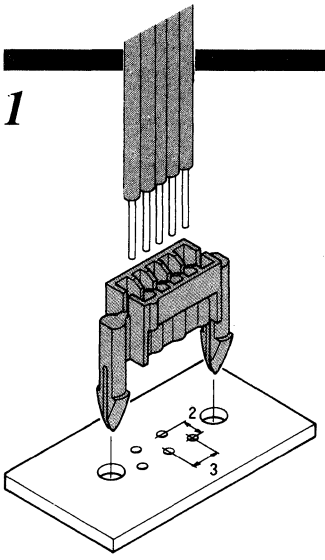
Once cable is inserted the leads are held firmly in place and cannot be removed.

Cable Holders

Available in straight and right angle versions for 1.5, 2.0 and 2.5mm cable, this product serves three important functions:

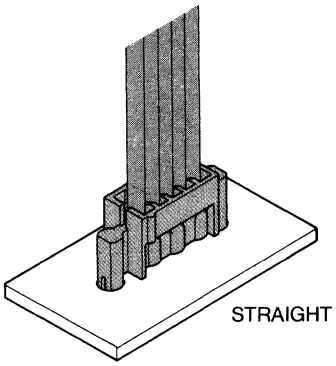
L

1



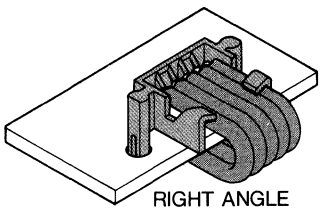
Guides the cable leads into an easy-to-solder 2mm by 3mm PCB layout.

2



Secures the cable to the PCB for soldering.

3

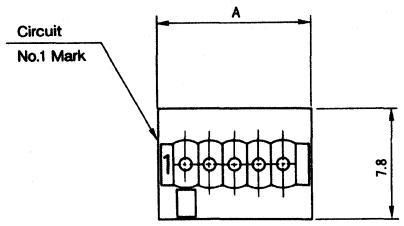


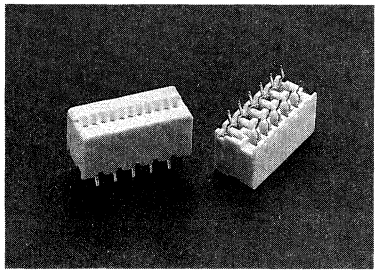
Serves as a strain relief to prevent undue stress on the solder joints.

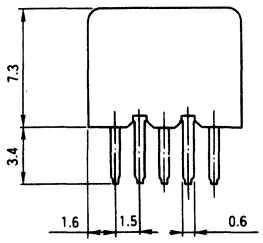
1.5mm .059" Center Jumper Socket

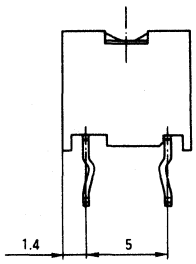
52275 Series
Straight

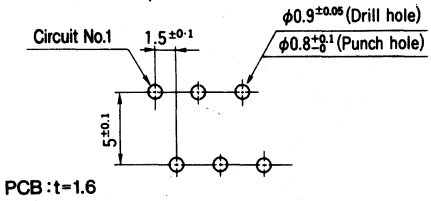
- Removal type
- Glass filled polyester, UL 94V-0
- Tin plated phosphor bronze terminal
- 5-11 circuits
- For topcoated ribbon cable
- Wire Range: AWG #26
- Insulation diameter: 1.5mm max.
- Strip length: 7mm
- 150V, 1.5 amps max.











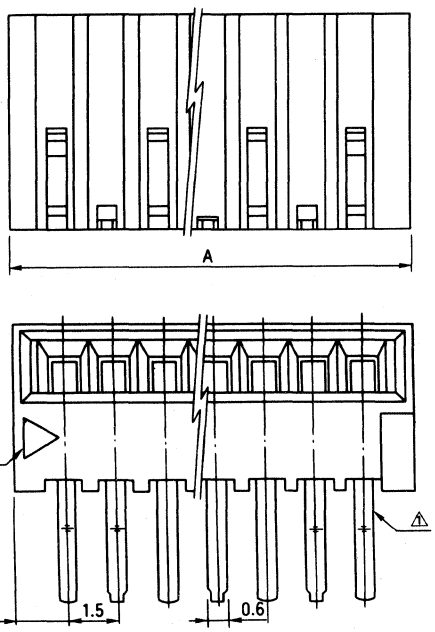
PCB Layout

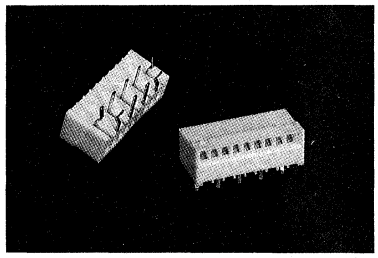
Ordering Information and Dimensions in mm

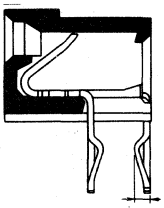
Circuits	Order No.	Dim. A	Circuits	Order No.	Dim. A
5	52275-0510	9.2	9	52275-0910	15.2
6	52275-0610	10.7	10	52275-1010	16.7
7	52275-0710	12.2	11	52275-1110	18.2
8	52275-0810	13.7			

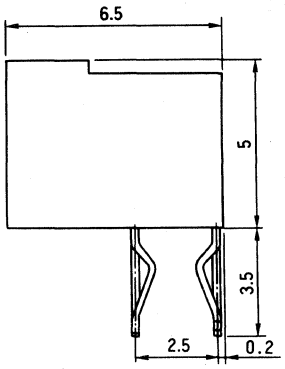
52273 Series
Right Angle

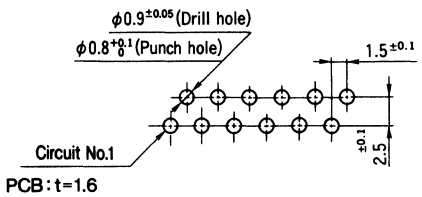
- Removal type
- Glass filled polyester, UL 94V-0
- Tin plated phosphor bronze terminal
- 7, 9, 10, 15, 19 circuits
- For topcoated ribbon cable
- Wire Range: AWG #26
- Insulation diameter: 1.5mm max.
- Strip length: 4.5mm
- 150V, 1.5 amps max.











PCB Layout

Ordering Information and Dimensions in mm

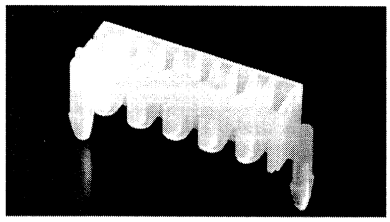
⚠ PC tails are kinked on each end

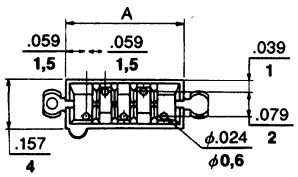
Circuits	Order No.	Dim. A	Circuits	Order No.	Dim. A
7	52273-0710	12.0	15	52273-1510	24.0
9	52273-0910	15.0	19	52273-1910	30.0
10	52273-1010	16.0			

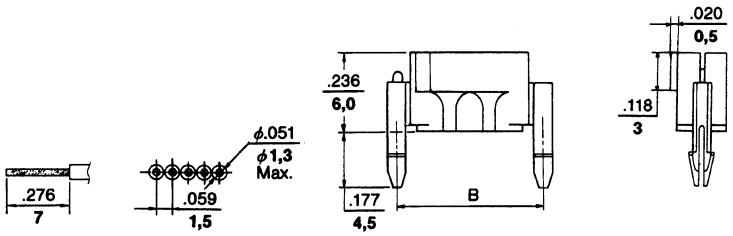
1.5mm .059" Center Ribbon Cable Holder

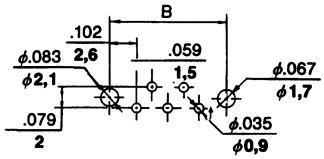
51016 Series
Straight

- Nylon 6/6, UL 94V-2
- 3-12 circuits
- For topcoated ribbon cable
- Wire range: AWG #26
- Insulation diameter: 1.3mm max.
- Strip length: 7mm









PCB Layout

Inch / mm

Dimensions

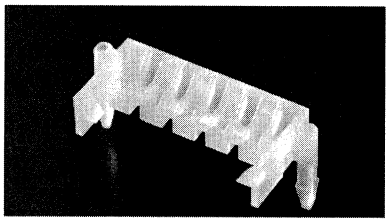
Circuits	Dim. A		Dim. B		Circuits	Dim. A		Dim. B	
3	.236	6,0	.323	8,2	8	.531	13,5	.618	15,7
4	.295	7,5	.382	9,7	9	.591	15,0	.677	17,2
5	.354	9,0	.441	11,2	10	.650	16,5	.736	18,7
6	.413	10,5	.500	12,7	11	.709	18,0	.795	20,2
7	.472	12,0	.559	14,2	12	.768	19,5	.854	21,7

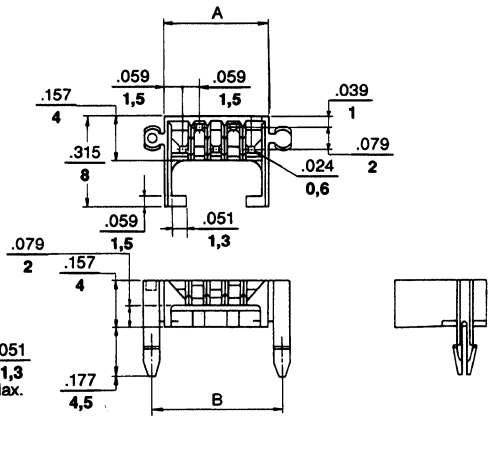
Ordering Information

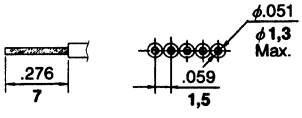
Order No.-51016-XX00
Replace "XX" in Order No. with number of circuits required, 03-12

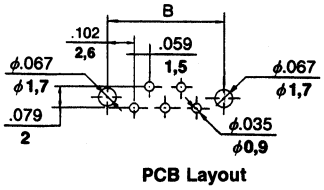
51020 Series
Right Angle

- Nylon 6/6, UL 94V-2
- 3-12 circuits
- For topcoated ribbon cable
- Wire range: AWG #26
- Insulation diameter: 1.3mm max.
- Strip length: 7mm









PCB Layout

Inch / mm

Dimensions

Circuits	Dim. A		Dim. B		Circuits	Dim. A		Dim. B	
3	.236	6,0	.323	8,2	8	.531	13,5	.618	15,7
4	.295	7,5	.382	9,7	9	.591	15,0	.677	17,2
5	.354	9,0	.441	11,2	10	.650	16,5	.736	18,7
6	.413	10,5	.500	12,7	11	.709	18,0	.795	20,2
7	.472	12,0	.559	14,2	12	.768	19,5	.854	21,7

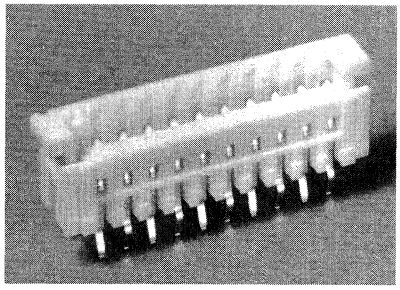
Ordering Information

Order No.-51020-XX00
Replace "XX" in Order No. with number of circuits required, 03-12

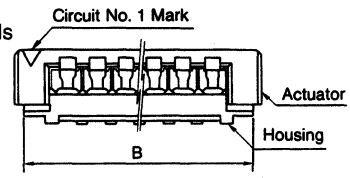
L

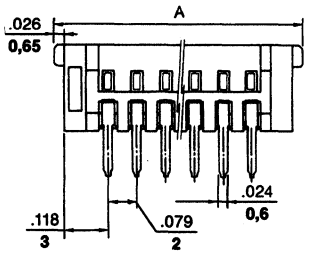
2.0mm .079" Center Wire Trap

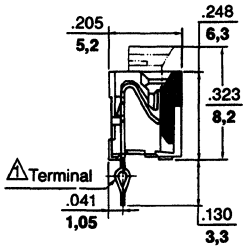
52147 Series
Pull-Cover Style, Straight

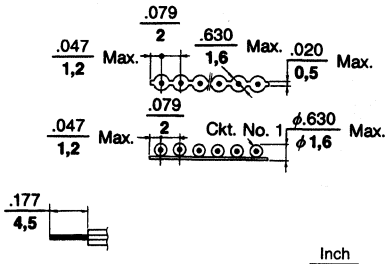


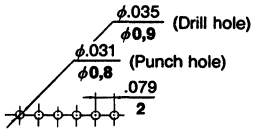
- Glass filled polyester, UL 94V-0
- Tin plated phosphor bronze terminals
- 2-15 circuits
- 150V, 2 amps max.
- For topcoated ribbon cable
- Wire range: AWG #26
- Insulation diameter: 1.6mm max.
- Strip length: 4.5mm











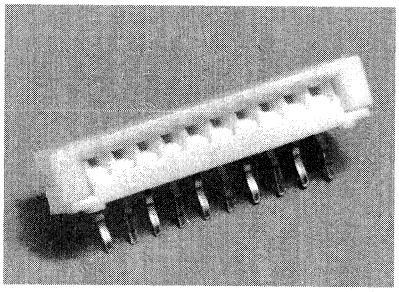
PCB Layout

Inch / mm

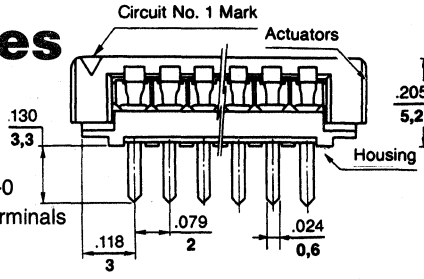
Ordering Information and Dimensions

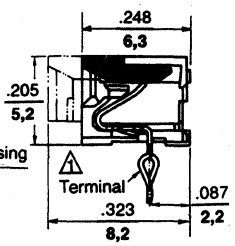
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	52147-0210	.366 **9,3**	.315 **8,0**	9	52147-0910	.917 **23,3**	.866 **22,0**
3	52147-0310	.445 **11,3**	.344 **10,0**	10	52147-1010	.996 **25,3**	.945 **24,0**
4	52147-0410	.524 **13,3**	.472 **12,0**	11	52147-1110	1.075 **27,3**	1.024 **26,0**
5	52147-0510	.602 **15,3**	.551 **14,0**	12	52147-1210	1.154 **29,3**	1.102 **28,0**
6	52147-0610	.681 **17,3**	.630 **16,0**	13	52147-1310	1.232 **31,3**	1.181 **30,0**
7	52147-0710	.760 **19,3**	.709 **18,0**	14	52147-1410	1.311 **33,3**	1.260 **32,0**
8	52147-0810	.839 **21,3**	.787 **20,0**	15	52147-1510	1.390 **35,3**	1.339 **34,0**

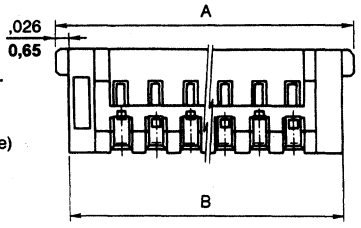
52151 Series
Pull-Cover Style Right Angle

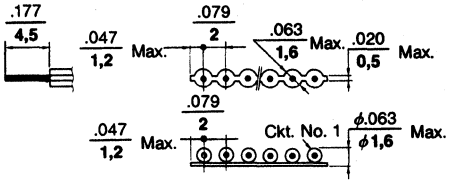


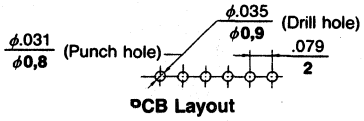
- Glass filled polyester, UL 94V-0
- Tin plated phosphor bronze terminals
- 2-15 circuits
- 150V, 2 amps max.
- For topcoated ribbon cable
- Wire range: AWG #26
- Insulation diameter: 1.6mm max.
- Strip length: 4.5mm











PCB Layout

Inch / mm

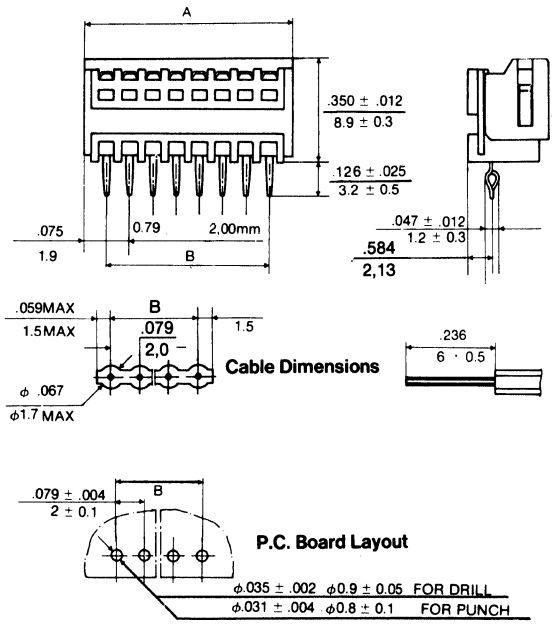
Ordering Information and Dimensions

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	52151-0210	.366 **9,3**	.315 **8,0**	9	52151-0910	.917 **23,3**	.866 **22,0**
3	52151-0310	.445 **11,3**	.344 **10,0**	10	52151-1010	.996 **25,3**	.945 **24,0**
4	52151-0410	.524 **13,3**	.472 **12,0**	11	52151-1110	1.075 **27,3**	1.024 **26,0**
5	52151-0510	.602 **15,3**	.551 **14,0**	12	52151-1210	1.154 **29,3**	1.102 **28,0**
6	52151-0610	.681 **17,3**	.630 **16,0**	13	52151-1310	1.232 **31,3**	1.181 **30,0**
7	52151-0710	.760 **19,3**	.709 **18,0**	14	52151-1410	1.311 **33,3**	1.260 **32,0**
8	52151-0810	.839 **21,3**	.787 **20,0**	15	52151-1510	1.390 **35,3**	1.339 **34,0**

2.0mm .079" Center Wire Trap

52007 Series
Push-Cover Style
Straight

- Glass filled polyester, UL 94V-0
- Tin plated phosphor bronze terminals
- 2-12 circuits
- 150V, 3 amps max.
- For topcoated ribbon cable
- Wire range: AWG #24 - #26
- Insulation diameter: 1.7mm max.
- Strip length: 6mm



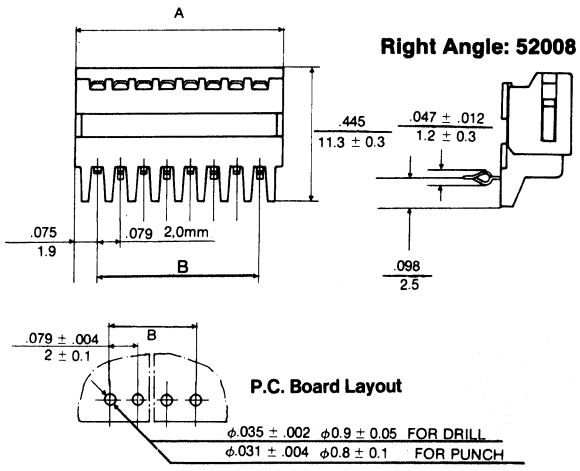
Ordering Information

Order No.
52007-**XX**10
Replace "**XX**" with number of circuits, 02-12

Inch / mm

52008 Series
Push-Cover Style
Right Angle

- Glass filled polyester, UL 94V-0
- Tin plated phosphor bronze terminals
- 2-12 circuits
- 150V, 3 amps max.
- For topcoated ribbon cable
- Wire range: AWG #24 - #26
- Insulation diameter: 1.7mm max.
- Strip length: 6mm



Ordering Information

Order No.
52008-**XX**10
Replace "**XX**" with number of circuits, 02-12

Inch / mm

Dimensions

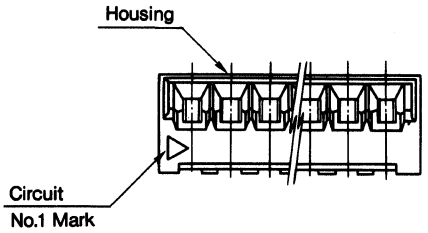
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.228 5,8	.079 2	4	.386 9,8	.236 6	6	.543 13,8	.393 10	8	.701 17,8	.551 14	10	.858 21,8	.709 18	12	1.016 25,8	.866 22
3	.307 7,8	.157 4	5	.464 11,8	.315 8	7	.622 15,8	.472 12	9	.780 19,8	.630 16	11	.937 23,8	.737 20			

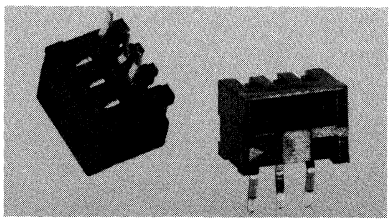
L

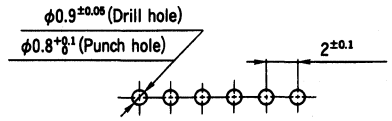
2.0mm .079" Center Jumper Socket

52287 Series
Removable Type, Straight

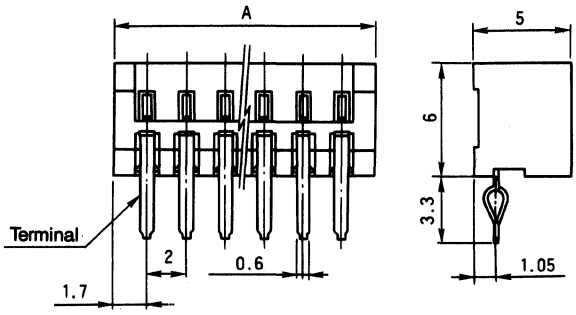
- Glass filled polyester, UL 94V-0
- Tin plated phosphor bronze terminals
- 2-15 circuits
- 150V, 2 amps max.
- For topcoated ribbon cable
- Wire Range: AWG #26
- Insulation diameter: 1.6mm max.
- Strip length: 4.5mm







PCB Layout



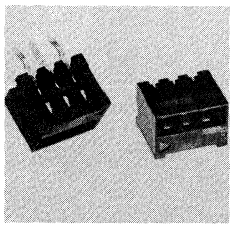
Ordering Information and Dimensions in mm

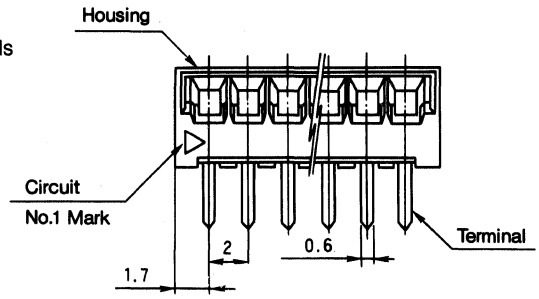
⚠ All PC tails are kinked

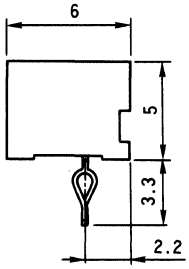
Circuits	Order No.	Dim. A	Circuits	Order No.	Dim. A
2	52287-0211	5.4	9	52287-0911	19.4
3	52287-0311	7.4	10	52287-1011	21.4
4	52287-0411	9.4	11	52287-1111	23.4
5	52287-0511	11.4	12	52287-1211	25.4
6	52287-0611	13.4	13	52287-1311	27.4
7	52287-0711	15.4	14	52287-1411	29.4
8	52287-0811	17.4	15	52287-1511	31.4

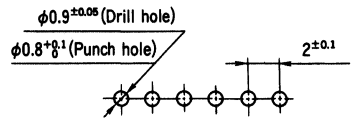
52288 Series
Removable Type, Right Angle

- Glass filled polyester, UL 94V-0
- Tin plated phosphor bronze terminals
- 2-15 circuits
- 150V, 2 amps max.
- For topcoated ribbon cable
- Wire Range: AWG #26
- Insulation diameter: 1.6mm max.
- Strip length: 4.5mm

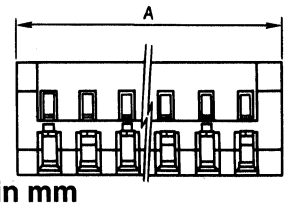


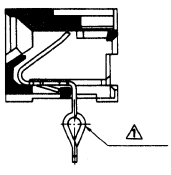






PCB Layout





Ordering Information and Dimensions in mm

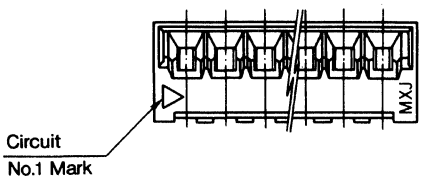
⚠ All PC tails are kinked

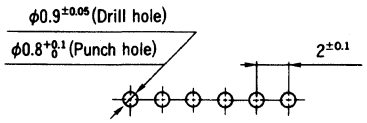
Circuits	Order No.	Dim. A	Circuits	Order No.	Dim. A
2	52288-0211	5.4	9	52288-0911	19.4
3	52288-0311	7.4	10	52288-1011	21.4
4	52288-0411	9.4	11	52288-1111	23.4
5	52288-0511	11.4	12	52288-1211	25.4
6	52288-0611	13.4	13	52288-1311	27.4
7	52288-0711	15.4	14	52288-1411	29.4
8	52288-0811	17.4	15	52288-1511	31.4

2.0mm .079" Center Jumper Socket

52153 Series
Fixed Type, Straight

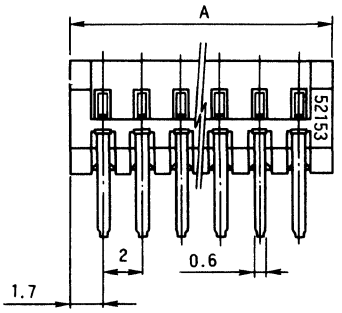
- Glass filled polyester, UL 94V-0
- Tin plated phosphor bronze terminal
- 2-15 circuits
- 150V, 2 amps max.
- For topcoated ribbon cable
- Wire Range: AWG #26
- Insulation diameter: 1.6mm max.
- Strip length: 4.5mm

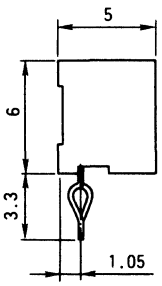


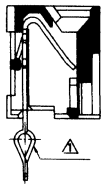


PCB : t=1.6

PCB Layout





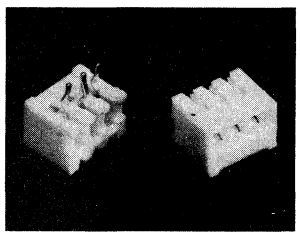


Ordering Information and Dimensions in mm

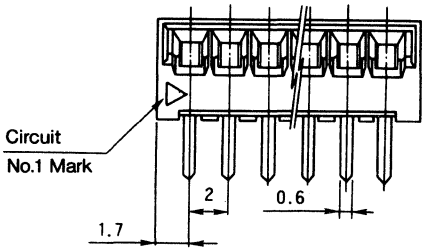
⚠ All PC tails are kinked except 2 ckt.

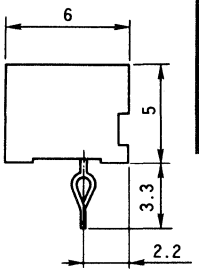
Circuits	Order No.	Dim. A	Circuits	Order No.	Dim. A
2	52153-0210	5.4	9	52153-0910	19.4
3	52153-0310	7.4	10	52153-1010	21.4
4	52153-0410	9.4	11	52153-1110	23.4
5	52153-0510	11.4	12	52153-1210	25.4
6	52153-0610	13.4	13	52153-1310	27.4
7	52153-0710	15.4	14	52153-1410	29.4
8	52153-0810	17.4	15	52153-1510	31.4

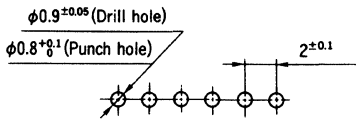
52154 Series
Fixed Type, Right Angle



- Glass filled polyester, UL 94V-0
- Tin plated phosphor bronze terminal
- 2-15 circuits
- 150V, 2 amps max.
- For topcoated ribbon cable
- Wire Range: AWG #26
- Insulation diameter: 1.6mm max.
- Strip length: 4.5mm

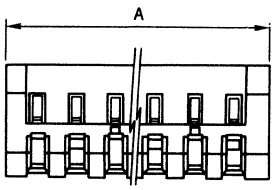


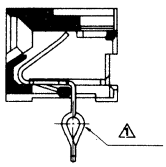




PCB : t=1.6

PCB Layout





Ordering Information and Dimensions in mm

⚠ All PC tails are kinked except 2 ckt.

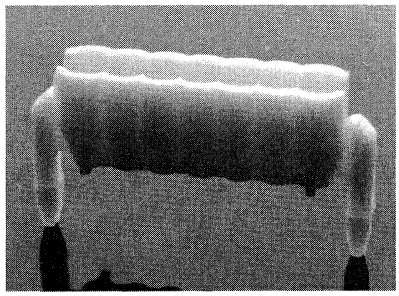
Circuits	Order No.	Dim. A	Circuits	Order No.	Dim. A
2	52154-0210	5.4	9	52154-0910	19.4
3	52154-0310	7.4	10	52154-1010	21.4
4	52154-0410	9.4	11	52154-1110	23.4
5	52154-0510	11.4	12	52154-1210	25.4
6	52154-0610	13.4	13	52154-1310	27.4
7	52154-0710	15.4	14	52154-1410	29.4
8	52154-0810	17.4	15	52154-1510	31.4

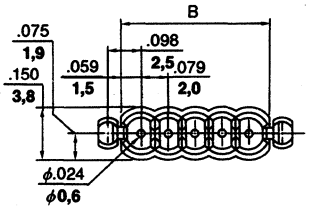
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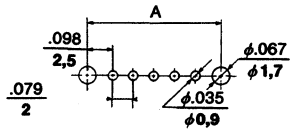
2.0mm .079" Center Ribbon Cable Holder

51039 Series
Straight

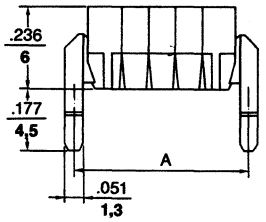
- Nylon 6/6, UL 94V-0
- 2-12 circuits
- For topcoated ribbon cable
- Wire range: AWG #26
- Insulation diameter: 1.6mm max.
- Strip length: 6mm

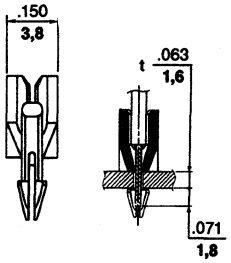


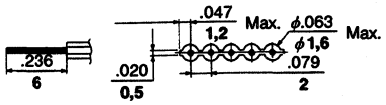




PCB Layout







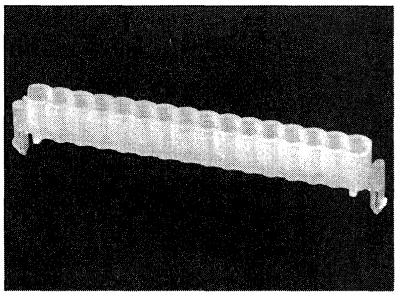
Inch / mm

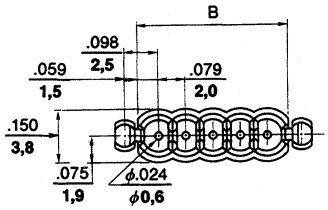
Ordering Information and Dimensions

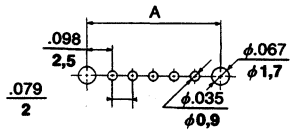
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	51039-0200	.276 7,0	.197 5,0	8	51039-0800	.748 19,0	.670 17,0
3	51039-0300	.354 9,0	.276 7,0	9	51039-0900	.827 21,0	.748 19,0
4	51039-0400	.433 11,0	.354 9,0	10	51039-1000	.906 23,0	.827 21,0
5	51039-0500	.512 13,0	.433 11,0	11	51039-1100	.984 25,0	.906 23,0
6	51039-0600	.590 15,0	.512 13,0	12	51039-1200	1.063 27,0	.984 25,0
7	51039-0700	.670 17,0	.591 15,0				

51048 Series
Right Angle, Low Profile

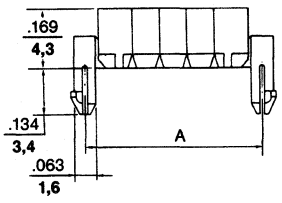
- Nylon 6/6, UL 94V-0
- 2-17 circuits
- For topcoated ribbon cable
- Wire range: AWG #26
- Insulation diameter: 1.6mm max.
- Strip length: 4.5mm

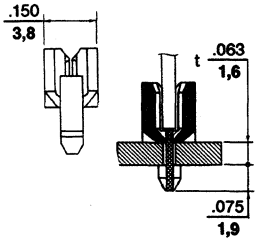


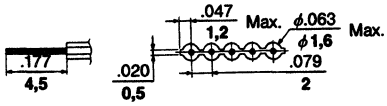




PCB Layout







Inch / mm

Ordering Information and Dimensions

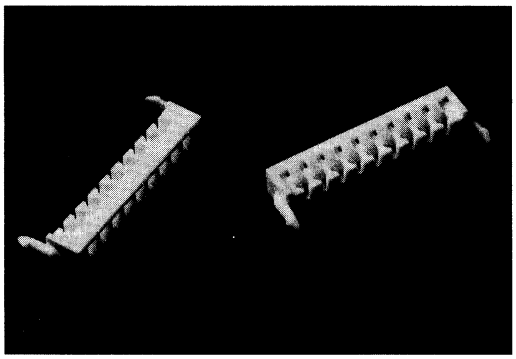
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	51048-0200	.276 7,0	.197 5,0	10	51048-1000	.906 23,0	.827 21,0
3	51048-0300	.354 9,0	.276 7,0	11	51048-1100	.984 25,0	.906 23,0
4	51048-0400	.433 11,0	.354 9,0	12	51048-1200	1.063 27,0	.984 25,0
5	51048-0500	.512 13,0	.433 11,0	13	51048-1300	1.141 29,0	1.063 27,0
6	51048-0600	.591 15,0	.512 13,0	14	51048-1400	1.220 31,0	1.142 29,0
7	51048-0700	.670 17,0	.591 15,0	15	51048-1500	1.299 33,0	1.220 31,0
8	51048-0800	.748 19,0	.670 17,0	16	51048-1600	1.378 35,0	1.299 33,0
9	51048-0900	.827 21,0	.748 19,0	17	51048-1700	1.459 37,0	1.378 35,0

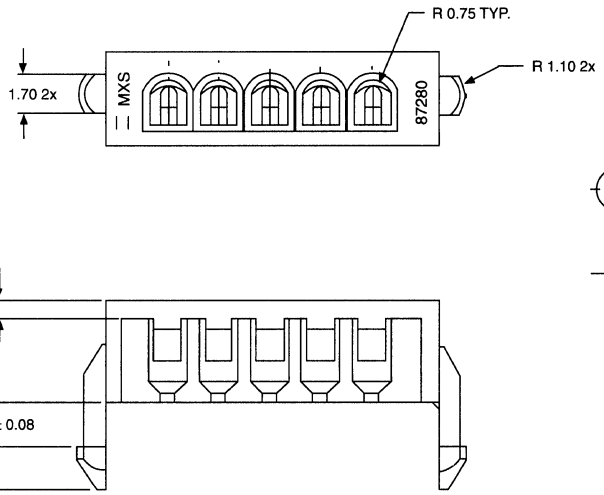
2.0mm .079" Center Cable Holder

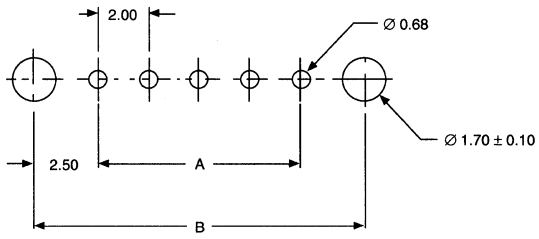
87280 Series

For Discrete Wire, Flat Cable and Ribbon Cable

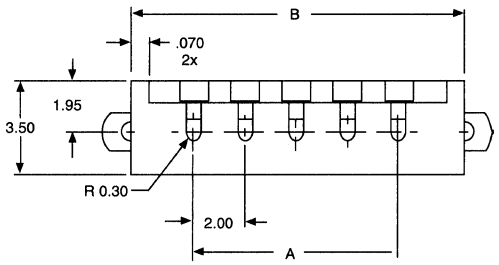
- For use with AWG 26-28 wire
- Nylon 6/6, UL 94V-0
- 2-15 circuits

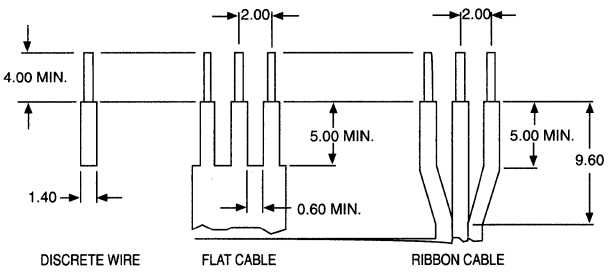






PCB Layout





CABLE DIMENSIONS REF.

L

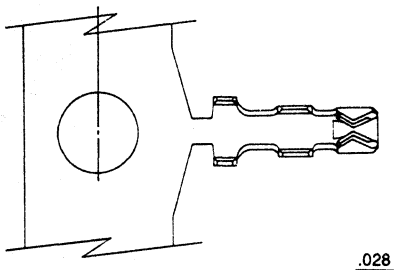
Ordering Information and Dimensions in mm

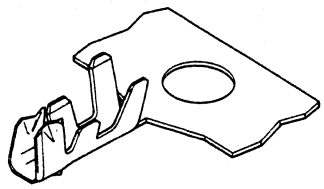
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	87280-0200	2.00	7.00	9	87280-0900	16.00	21.00
3	87280-0300	4.00	9.00	10	87280-1000	18.00	23.00
4	87280-0400	6.00	11.00	11	87280-1100	20.00	25.00
5	87280-0500	8.00	13.00	12	87280-1200	22.00	27.00
6	87280-0600	10.00	15.00	13	87280-1300	24.00	29.00
7	87280-0700	12.00	17.00	14	87280-1400	26.00	31.00
8	87280-0800	14.00	19.00	15	87280-1500	28.00	33.00

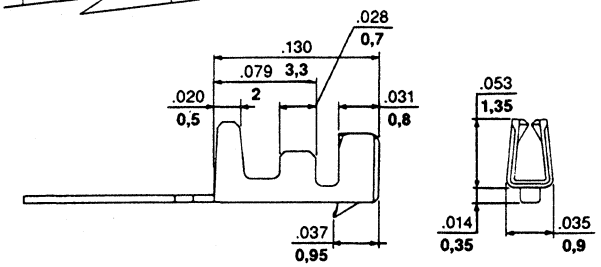
1.25mm .049" Center Wire-to-Board System

50058/50079 Series
Crimp Terminal

- Tin plated phosphor bronze terminals
- Wire range: AWG #26 - #32
- Insulation diameter: 1.0mm max.
- Strip length: 1.4mm - 1.9mm
- 125V, 1 amp max. (0.8 amp/AWG #32)
- Accepts housing 51021







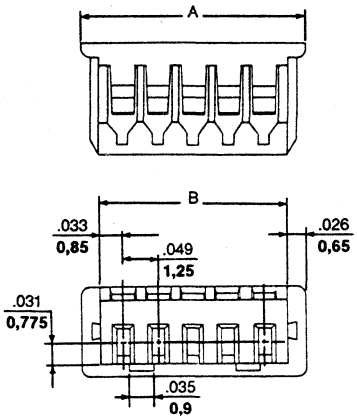
Inch / mm

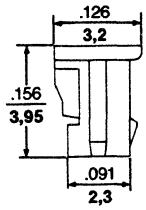
Ordering Information

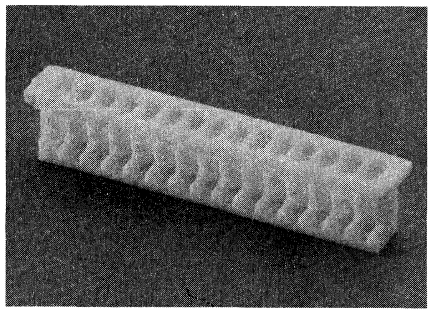
Order No.	Terminal	Wire Range	M15A Press	M15A Crimp Die	Mini-Mac Applicator	TM40/42 Crimp Die	Hand Tool	Extraction Tool
50058-8000	Chain	AWG #28 - #32	57117-4000	50067-3000	11-18-2154	11-40-2245	—	57072-6000
50079-8000		AWG #26 - #28					—	
50058-8100	Loose	AWG #28 - #32	—	—	11-18-2156	—	57068-5000	
50079-8100		AWG #26 - #28					57177-5000	

51021 Series
Receptacle Housing

- Polyester, UL 94V-0
- 2-15 circuits
- Accepts terminals: 50058, 50079
- Mates with: 53047, 53048, 53261







Inch / mm

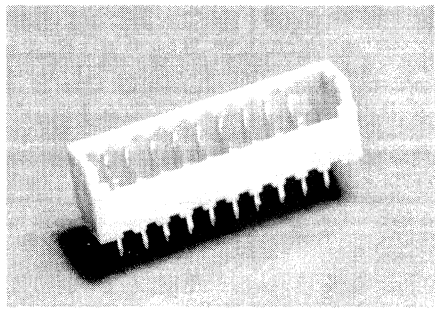
Ordering Information and Dimensions

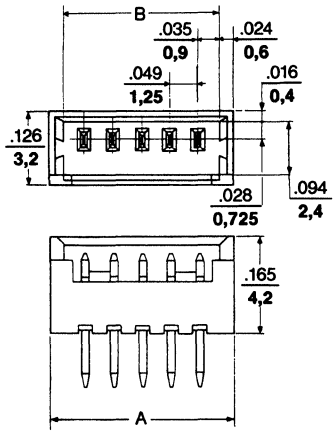
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	51021-0200	.167 **4,25**	.116 **2,95**	9	51021-0900	.512 **13,00**	.461 **11,70**
3	51021-0300	.217 **5,50**	.165 **4,20**	10	51021-1000	.561 **14,25**	.510 **12,95**
4	51021-0400	.266 **6,75**	.215 **5,45**	11	51021-1100	.610 **15,50**	.559 **14,20**
5	51021-0500	.315 **8,00**	.264 **6,70**	12	51021-1200	.659 **16,75**	.608 **15,45**
6	51021-0600	.364 **9,25**	.313 **7,95**	13	51021-1300	.709 **18,00**	.657 **16,70**
7	51021-0700	.413 **10,50**	.362 **9,20**	14	51021-1400	.758 **19,25**	.707 **17,95**
8	51021-0800	.463 **11,75**	.411 **10,45**	15	51021-1500	.807 **20,50**	.756 **19,20**

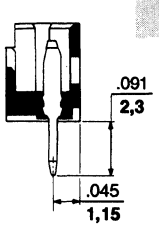
1.25mm .049" Center Wire-to-Board System

53047 Series
Straight Header

- Nylon 6/6, UL 94V-0
- Tin plated phosphor bronze pins
- 2-15 circuits
- Mates with 51021
- Mated height: 5,2mm .205";
  Mated width: 3,2mm .126"









PCB Layout

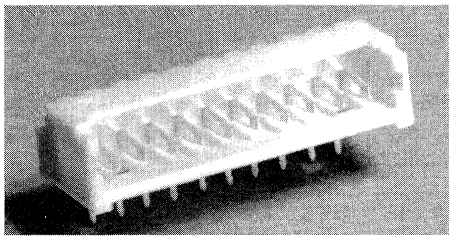
Inch / mm

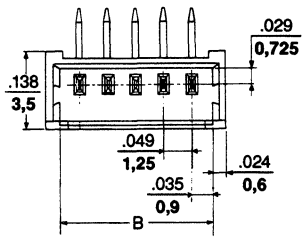
Ordering Information and Dimensions

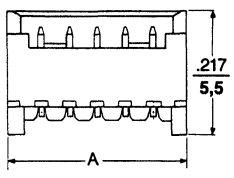
Circuits	Order No.	Dim. A		Dim. B		Circuits	Order No.	Dim. A		Dim. B	
2	53047-0210	.167	4,25	.120	3,05	9	53047-0910	.512	13,00	.465	11,80
3	53047-0310	.217	5,50	.169	4,30	10	53047-1010	.561	14,25	.514	13,05
4	53047-0410	.266	6,75	.219	5,55	11	53047-1110	.610	15,50	.563	14,30
5	53047-0510	.315	8,00	.268	6,80	12	53047-1210	.659	16,75	.612	15,55
6	53047-0610	.364	9,25	.317	8,05	13	53047-1310	.709	18,00	.661	16,80
7	53047-0710	.413	10,50	.366	9,30	14	53047-1410	.758	19,25	.711	18,05
8	53047-0810	.463	11,75	.415	10,55	15	53047-1510	.807	20,50	.760	19,30

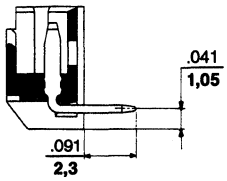
53048 Series
Right Angle Header

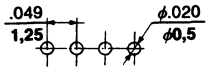
- Nylon 6/6, UL 94V-0
- Tin plated phosphor bronze pins
- 2-15 circuits
- Mates with 51021
- Mated height: 3,5mm .138";
  Mated width: 6,5mm .256"











PCB Layout

Inch / mm

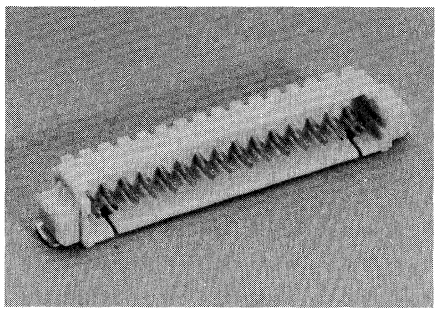
Ordering Information and Dimensions

Circuits	Order No.	Dim. A		Dim. B		Circuits	Order No.	Dim. A		Dim. B	
2	53048-0210	.167	4,25	.120	3,05	9	53048-0910	.512	13,00	.465	11,80
3	53048-0310	.217	5,50	.169	4,30	10	53048-1010	.561	14,25	.514	13,05
4	53048-0410	.266	6,75	.219	5,55	11	53048-1110	.610	15,50	.563	14,30
5	53048-0510	.315	8,00	.268	6,80	12	53048-1210	.659	16,75	.612	15,55
6	53048-0610	.364	9,25	.317	8,05	13	53048-1310	.709	18,00	.661	16,80
7	53048-0710	.413	10,50	.366	9,30	14	53048-1410	.758	19,25	.711	18,05
8	53048-0810	.463	11,75	.415	10,55	15	53048-1510	.807	20,50	.760	19,30

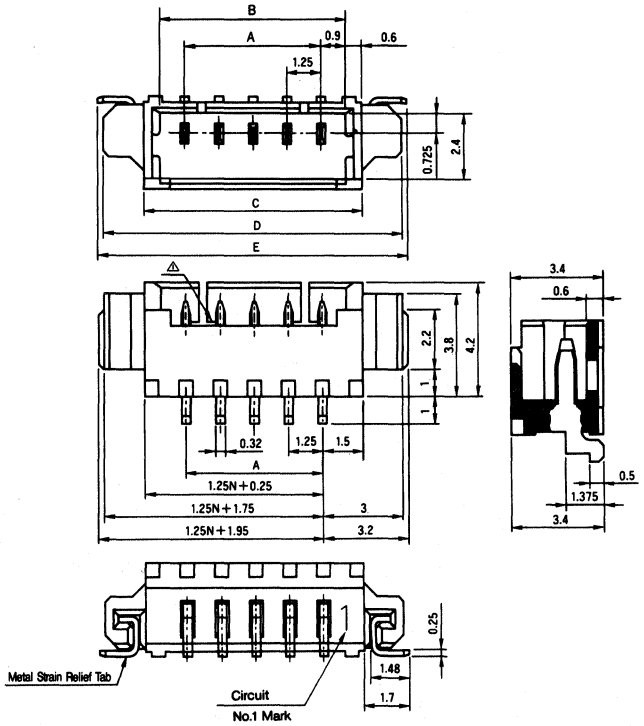
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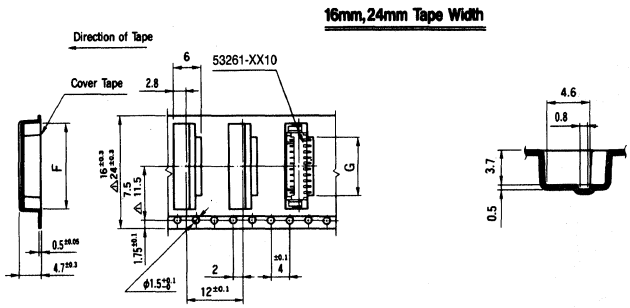
1.25mm .049" Center Wire-to-Board System

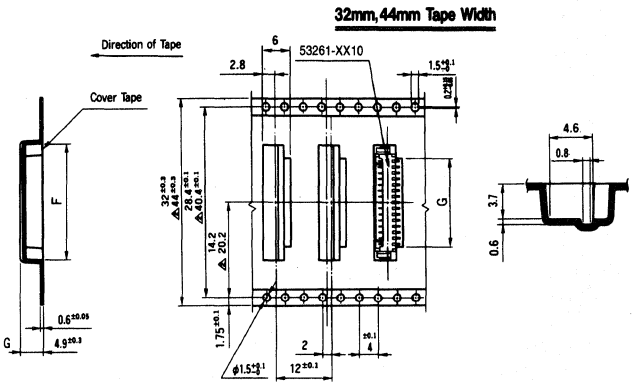
53261 Series
SMT Right Angle Header

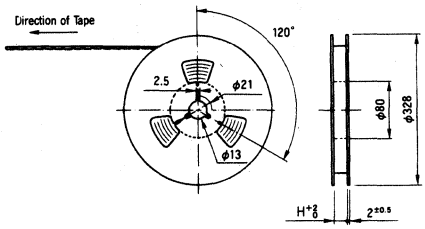


- Nylon 4/6, UL 94V-0
- Tin plated phosphor bronze pins
- Metal strain relief tabs
- 2-15 circuits
- Accepts housing 51021
- Available in reel form only

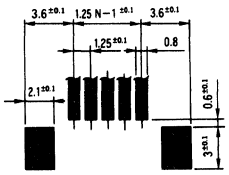








PCB Layout For Surface Mounting



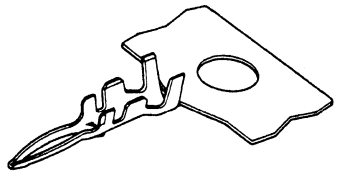
Ordering Information and Dimensions in mm

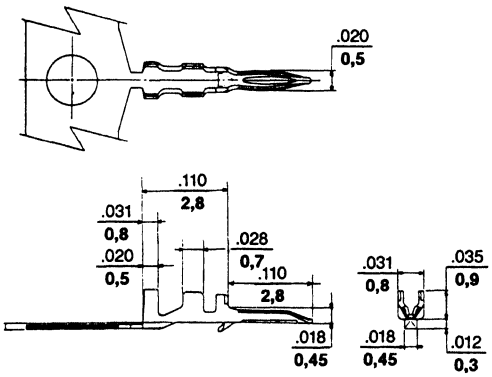
Circuits	Order No.	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G	Dim. H	Tape Width
2	53261-0290	1.25	3.05	4.25	7.25	7.65	8.25	2.45	16.4	16
3	53261-0390	2.50	4.30	5.50	8.50	8.90	9.50	3.70		
4	53261-0490	3.75	5.55	6.75	9.75	10.15	10.75	4.95	24.4	24
5	53261-0590	5.00	6.80	8.00	11.00	11.40	12.00	6.20		
6	53261-0690	6.25	8.05	9.25	12.25	12.65	13.25	7.45		
7	53261-0790	7.50	9.30	10.50	13.50	13.90	14.50	8.70		
8	53261-0890	8.75	10.55	11.75	14.75	15.15	15.75	9.95		
9	53261-0990	10.00	11.80	13.00	16.00	16.40	17.00	11.20		
10	53261-1090	11.25	13.05	14.25	17.25	17.65	18.25	12.45		
11	53261-1190	12.50	14.30	15.50	18.50	18.90	19.50	13.70	32.4	32
12	53261-1290	13.75	15.55	16.75	19.75	20.15	20.75	14.95		
14	53261-1490	16.25	18.05	19.25	22.25	22.65	23.25	17.45	44.4	44
15	53261-1590	17.50	19.30	20.50	23.50	23.90	24.50	18.70		

1.25mm .049" Center Board-In Connector

50061 Series
Crimp Terminal

- Tin plated phosphor bronze
- Wire range: AWG #28 - #32
- Insulation diameter: 1.0mm max.
- Strip length: 1.4-1.9 mm
- 125V, 1 amp max.
- Accepts housing 51022





Inch / mm

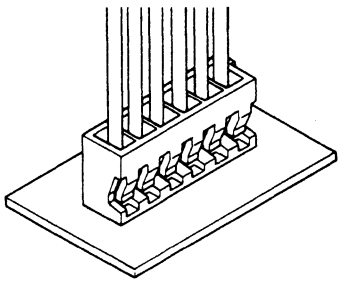
Ordering Information

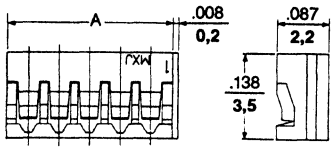
Order No.	Terminal	Automatic Tooling		TM40/42 Applicator	Hand Tool	Extraction Tool	Insertion Tool
		M15A Press	M15A Crimp Die				
50061-8000	Chain	57117-4000	57069-3000	11-40-2194	—	57072-6000	—
50061-8100	Loose	—	—		57070-5000		

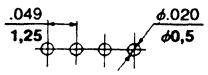
NOTE: Contact factory for special application tooling instructions.

51022 Series
Housing

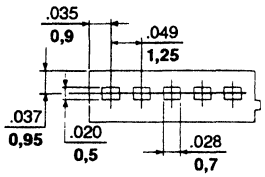
- Low profile
- Polyester, UL 94V-0
- 2-15 circuits
- Accepts terminal 50061







PCB Layout
PCB thickness: 0.8mm



Inch / mm

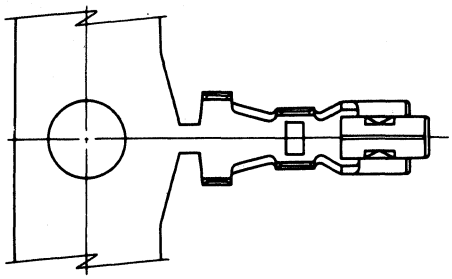
Ordering Information and Dimensions

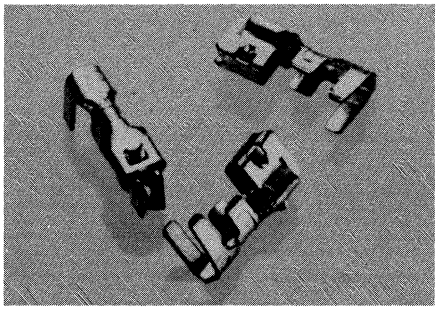
Circuits	Order No.	Dim. A	Circuits	Order No.	Dim. A
2	51022-0200	.120 **3,05**	9	51022-0900	.465 **11,80**
3	51022-0300	.169 **4,30**	10	51022-1000	.514 **13,05**
4	51022-0400	.219 **5,55**	11	51022-1100	.563 **14,30**
5	51022-0500	.268 **6,80**	12	51022-1200	.612 **15,55**
6	51022-0600	.317 **8,05**	13	51022-1300	.661 **16,80**
7	51022-0700	.366 **9,30**	14	51022-1400	.711 **18,05**
8	51022-0800	.415 **10,55**	15	51022-1500	.760 **19,30**

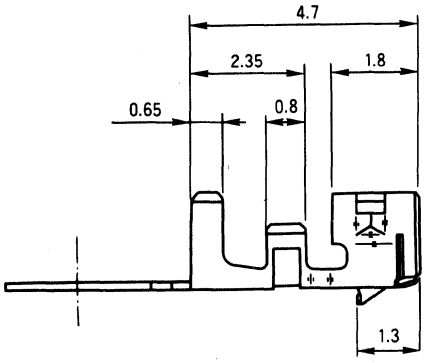
2.0mm .079" Center Wire-to-Board System

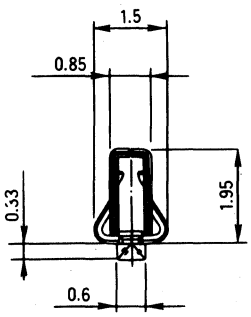
50212 Series
Crimp Terminal

- Tin plated phosphor bronze
- Wire range: AWG #24 - #30
- Insulation diameter: 1.4mm max.
- 125V, 2 amps max.
- Accepts housing 51065









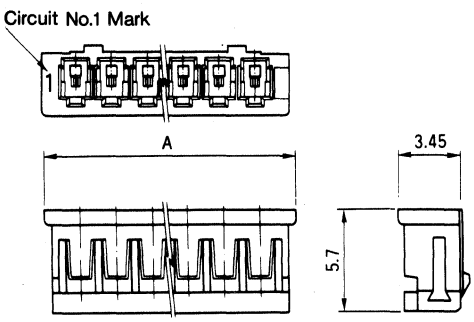
Ordering Information

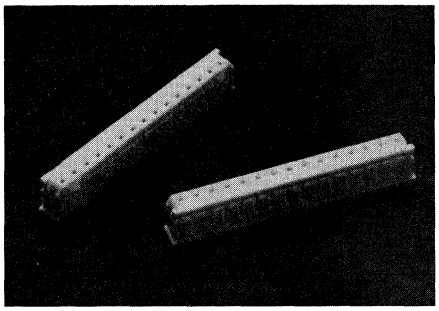
Order No.	Terminal	M15A Press	M15A Crimp Die	TM40/42 Applicator	TM40/42 Spare Tooling Kit	Mini Mac Applicator	Mini Mac Spare Tooling Kit	Hand Tool	Extraction Tool
50212-8000	Chain	57117-4000	57175-3000	11-40-2255	11-40-3259	11-18-2169	11-18-3160	—	57105-6000
50212-8100	Loose	—	—	—	—	—	—	57176-5000	

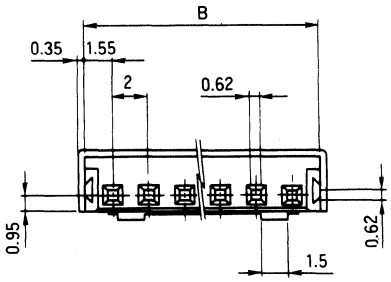
NOTE: Contact factory for special application tooling instructions.

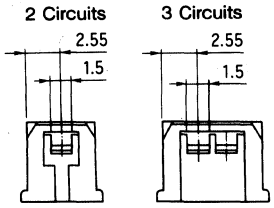
51065 Series
Housing

- Polyester, UL 94V-0
- 2-15 circuits
- Accepts terminal 50212
- Mates with: 53253
  53254









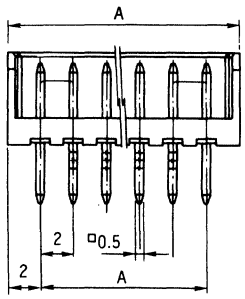
Ordering Information and Dimensions in mm

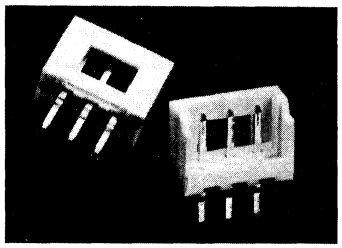
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	51065-0200	5.8	5.1	9	51065-0900	19.8	19.1
3	51065-0300	7.8	7.1	10	51065-1000	21.8	21.1
4	51065-0400	9.8	9.1	11	51065-1100	23.8	23.1
5	51065-0500	11.8	11.1	12	51065-1200	25.8	25.1
6	51065-0600	13.8	13.1	13	51065-1300	27.8	27.1
7	51065-0700	15.8	15.1	14	51065-1400	29.8	29.1
8	51065-0800	17.8	17.1	15	51065-1500	31.8	31.1

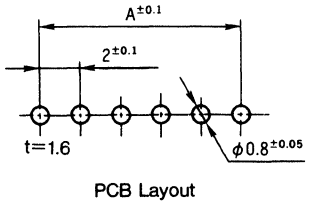
2.0mm .079" Center Wire-to-Board System

53253 Series
Straight Header

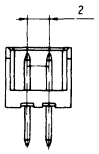
- Nylon 6/6, UL 94V-0
- Tin plated brass pins
- 2-15 circuits
- Mates with 51065

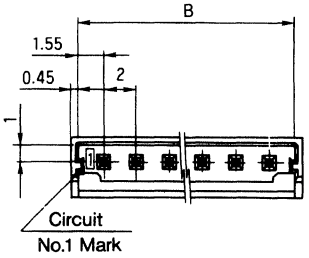


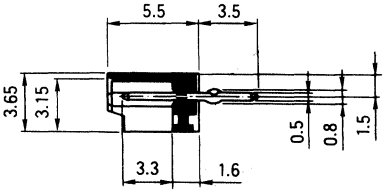




PCB Layout





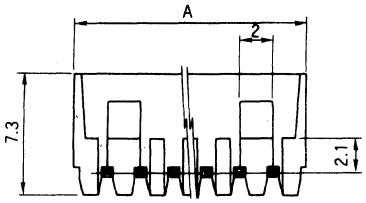


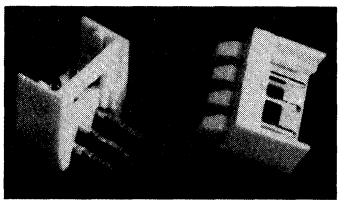
Ordering Information and Dimensions in mm

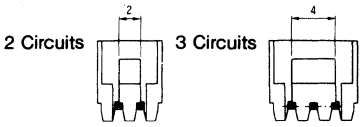
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	53253-0210	6.0	5.1	9	53253-0910	20.0	19.1
3	53253-0310	8.0	7.1	10	53253-1010	22.0	21.1
4	53253-0410	10.0	9.1	11	53253-1110	24.0	23.1
5	53253-0510	12.0	11.1	12	53253-1210	26.0	25.1
6	53253-0610	14.0	13.1	13	53253-1310	28.0	27.1
7	53253-0710	16.0	15.1	14	53253-1410	30.0	29.1
8	53253-0810	18.0	17.1	15	53253-1510	32.0	31.1

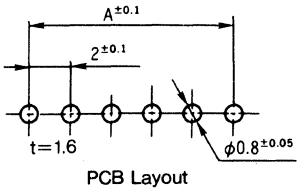
53254 Series
Right Angle Header

- Nylon 6/6, UL 94V-0
- Tin plated brass pins
- 2-15 circuits
- Mates with 51065

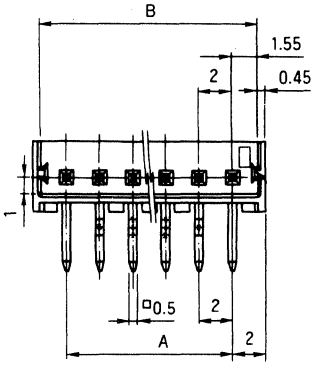


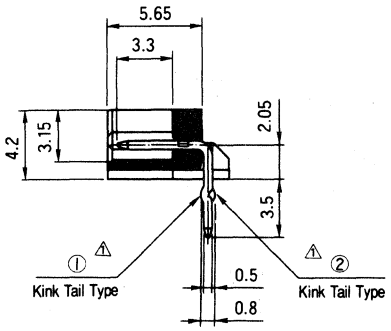






PCB Layout





Ordering Information and Dimensions in mm

⚠1 2 circuit header has no kinks

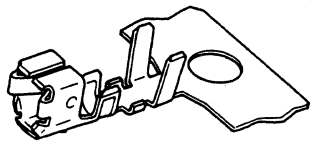
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	53254-0210	6.0	5.1	9	53254-0910	20.0	19.1
3	53254-0310	8.0	7.1	10	53254-1010	22.0	21.1
4	53254-0410	10.0	9.1	11	53254-1110	24.0	23.1
5	53254-0510	12.0	11.1	12	53254-1210	26.0	25.1
6	53254-0610	14.0	13.1	13	53254-1310	28.0	27.1
7	53254-0710	16.0	15.1	14	53254-1410	30.0	29.1
8	53254-0810	18.0	17.1	15	53254-1510	32.0	31.1

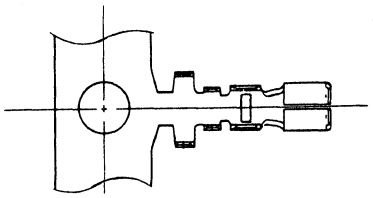
L

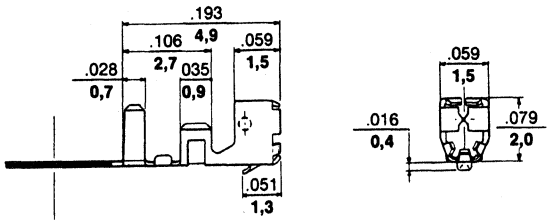
2.0mm .079" Center Wire-to-Board System

50011/50031 Series
Crimp Terminal

- Tin plated phosphor bronze
- Wire range: AWG #24 - #34
- Insulation diameter: 1.4mm max. (50011)
  0.9mm max. (50031)
- Strip length: 1.6-2.1mm
- 125V, 2 amps max. (50011)
  125V, 0.5 amp max. (50031)
- Accepts housing 51004





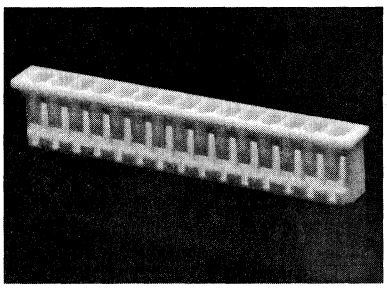


Inch / mm

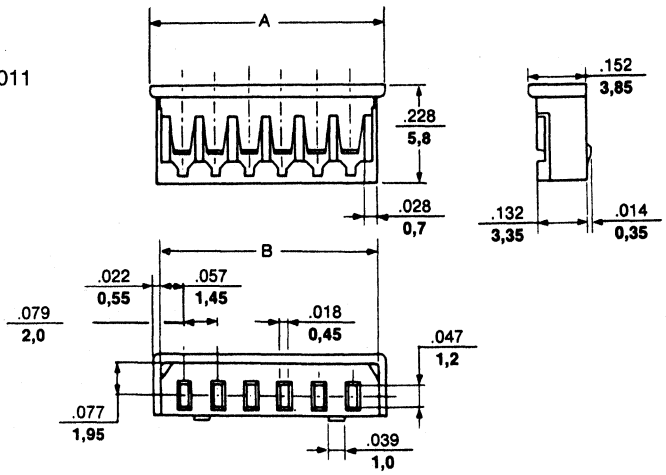
Ordering Information

Order No.	Terminal	Wire Range	Automatic Tooling				Hand Tool	Extraction Tool
			M15A Press	M15A Crimp Die	Mini Mac Applicator	TM40/42 Die		
50011-8000	Chain	AWG #24-30	57117-4000	57030-3000 (50011-8000)	11-18-3085	11-40-2136	—	57105-6000
50031-8000		AWG #30-34						
50011-8100	Loose	AWG #24-30	—	57047-3000 (50031-8000)	—	—	57032-5000	
50031-8100		AWG #30-34					57075-5000	

51004 Series
Housing



- Polyester, UL 94V-0
- 2-15 circuits
- Accepts terminal 50011
- Mates with: 53014
  53015
  53025



Inch / mm

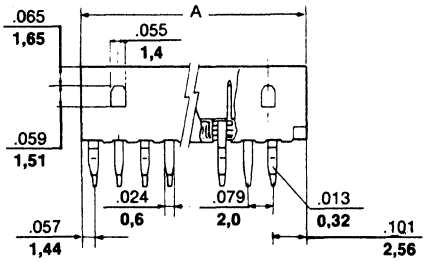
Ordering Information and Dimensions

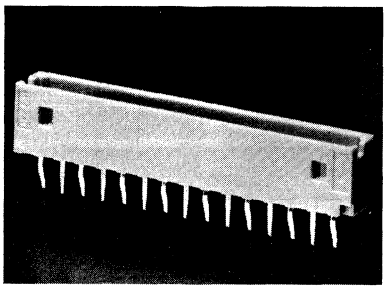
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	51004-0200	.236 **6**	.193 **4,9**	9	51004-0900	.787 **20**	.744 **18,9**
3	51004-0300	.315 **8**	.272 **6,9**	10	51004-1000	.866 **22**	.823 **20,9**
4	51004-0400	.394 **10**	.350 **8,9**	11	51004-1100	.945 **24**	.902 **22,9**
5	51004-0500	.472 **12**	.429 **10,9**	12	51004-1200	1.024 **26**	.980 **24,9**
6	51004-0600	.551 **14**	.508 **12,9**	13	51004-1300	1.102 **28**	1.059 **26,9**
7	51004-0700	.630 **16**	.587 **14,9**	14	51004-1400	1.181 **30**	1.138 **28,9**
8	51004-0800	.709 **18**	.665 **16,9**	15	51004-1500	1.260 **32**	1.217 **30,9**

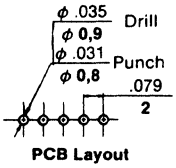
2.0mm .079" Center Wire-to-Board System

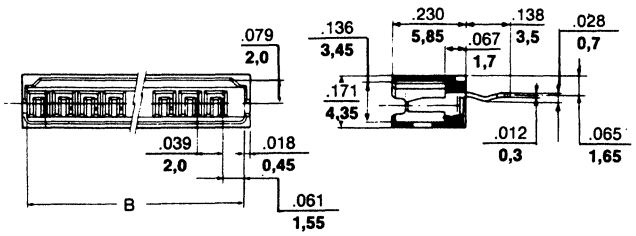
53014 Series
Straight Header

- Nylon 6/6, glass filled, UL 94V-0
- Tin plated phosphor bronze pins
- 2-15 circuits
- Mates with 51004









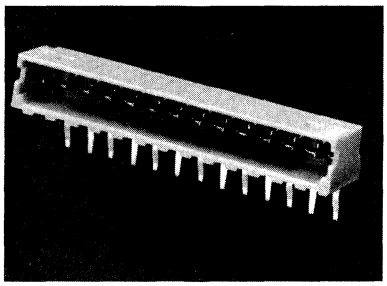
Inch / mm

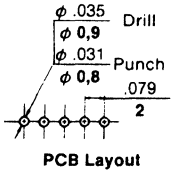
Ordering Information and Dimensions

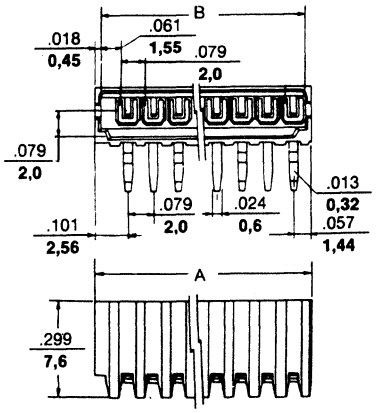
Circuits	Order No.	Dim. A		Dim. B		Circuits	Order No.	Dim. A		Dim. B	
2	53014-0210	.236	6	.201	5,1	9	53014-0910	.787	20	.752	19,1
3	53014-0310	.315	8	.280	7,1	10	53014-1010	.866	22	.831	21,1
4	53014-0410	.394	10	.358	9,1	11	53014-1110	.945	24	.909	23,1
5	53014-0510	.472	12	.437	11,1	12	53014-1210	1.024	26	.988	25,1
6	53014-0610	.551	14	.516	13,1	13	53014-1310	1.102	28	1.067	27,1
7	53014-0710	.630	16	.594	15,1	14	53014-1410	1.181	30	1.146	29,1
8	53014-0810	.709	18	.673	17,1	15	53014-1510	1.260	32	1.224	31,1

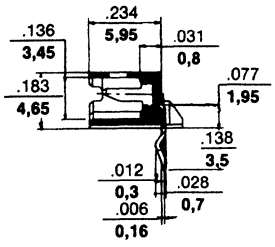
53015 Series
Right Angle Header

- Nylon 6/6, glass filled, UL 94V-0
- Tin plated phosphor bronze pins
- 2-15 circuits
- Mates with 51004









Inch / mm

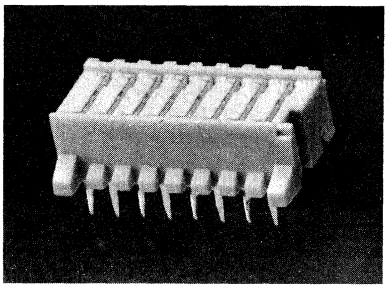
Ordering Information and Dimensions

Circuits	Order No.	Dim. A		Dim. B		Circuits	Order No.	Dim. A		Dim. B	
2	53015-0210	.236	6	.201	5,1	9	53015-0910	.787	20	.752	19,1
3	53015-0310	.315	8	.280	7,1	10	53015-1010	.866	22	.831	21,1
4	53015-0410	.394	10	.358	9,1	11	53015-1110	.945	24	.909	23,1
5	53015-0510	.472	12	.437	11,1	12	53015-1210	1.024	26	.988	25,1
6	53015-0610	.551	14	.516	13,1	13	53015-1310	1.102	28	1.067	27,1
7	53015-0710	.630	16	.594	15,1	14	53015-1410	1.181	30	1.146	29,1
8	53015-0810	.709	18	.673	17,1	15	53015-1510	1.260	32	1.224	31,1

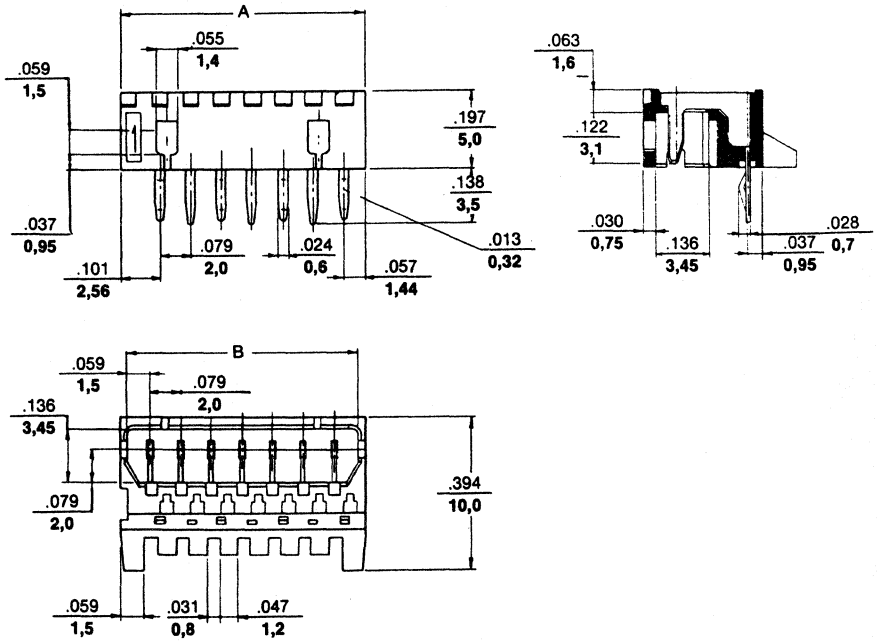
L

2.0mm .079" Center Wire-to-Board System

53025 Series
Bottom Entry Header



- Glass filled nylon 6/6, UL 94V-0
- Tin plated phosphor bronze pins
- 2-10 circuits
- Mates with 51004
- Mated height: 7.4mm .291"
- Mated width: 10mm .394"



Inch / mm

L

Ordering Information and Dimensions

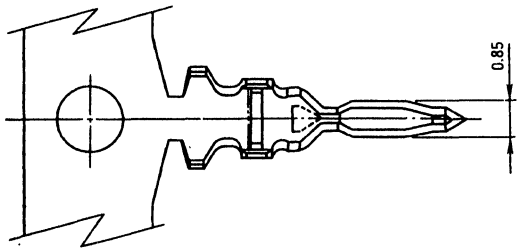
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	53025-0210	.236 **6**	.197 **5**	7	53025-0710	.630 **16**	.590 **15**
3	53025-0310	.315 **8**	.276 **7**	8	53025-0810	.709 **18**	.669 **17**
4	53025-0410	.394 **10**	.354 **9**	9	53025-0910	.787 **20**	.748 **19**
5	53025-0510	.472 **12**	.433 **11**	10	53025-1010	.866 **22**	.827 **21**
6	53025-0610	.551 **14**	.512 **13**				

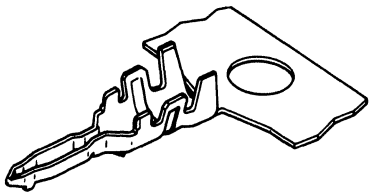
2.0mm .079" Center Board-In Connector

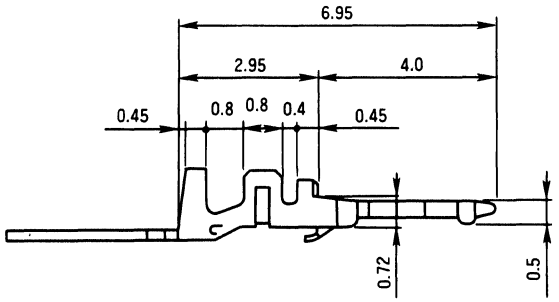
50034 Series

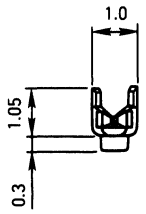
Crimp Terminal

- Tin plated phosphor bronze
- Wire range: AWG #26 - #30
- Insulation diameter: 1.4mm max.
- 125V, 2 amps max.
- Strip length: 1.4-1.9mm
- Accepts housing 51015









Ordering Information

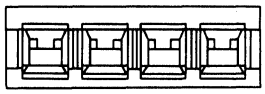
Order No.	Terminal	Automatic Tooling				Hand Tool	Extraction Tool
		M15A Press	M15A Crimp Die	TM40/42 Press & Die	TM40/42 Crimp Die		
50034-8000	Chain	57117-4000	57055-3000	TM40D8366A	11-40-2156	—	57057-6000
50034-8100	Loose	—	—	—	—	57056-5000	

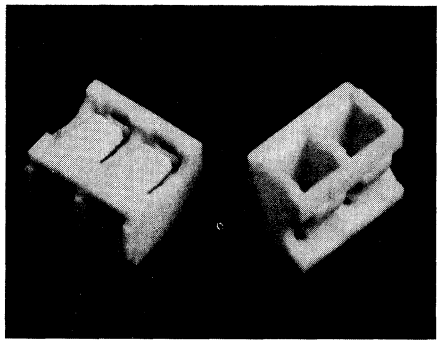
Note: Contact factory for special application tooling instructions.

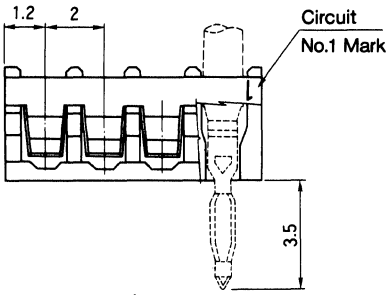
51015 Series

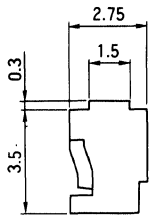
Housing

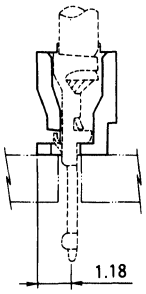
- Polyester, UL 94V-0
- 2-15 circuits
- Accepts terminal 50034

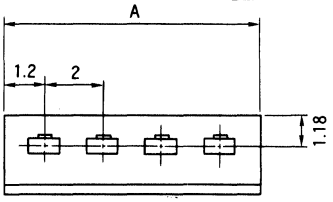


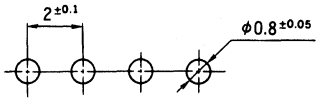












PCB Layout

Ordering Information and Dimensions in mm

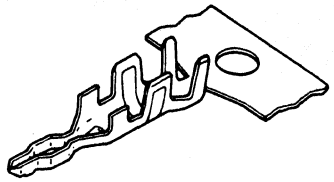
Circuits	Order No.	Dim. A	Circuits	Order No.	Dim. A
2	51015-0200	4.4	9	51015-0900	18.4
3	51015-0300	6.4	10	51015-1000	20.4
4	51015-0400	8.4	11	51015-1100	22.4
5	51015-0500	10.4	12	51015-1200	24.4
6	51015-0600	12.4	13	51015-1300	26.4
7	51015-0700	14.4	14	51015-1400	28.4
8	51015-0800	16.4	15	51015-1500	30.4

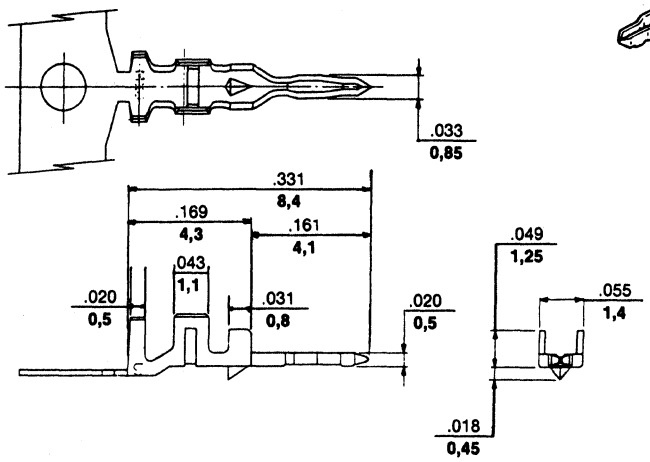
2.0mm .079" Center Board-In Connector

5378T, 5378TL Series

Terminal

- Tin plated brass
- Wire range: AWG #24 - #28
- Insulation diameter: 1.5mm max.
- Strip length: 1.7-2.3mm
- 125V, 2 amps max.
- Accepts housing 5379-N





Inch / mm

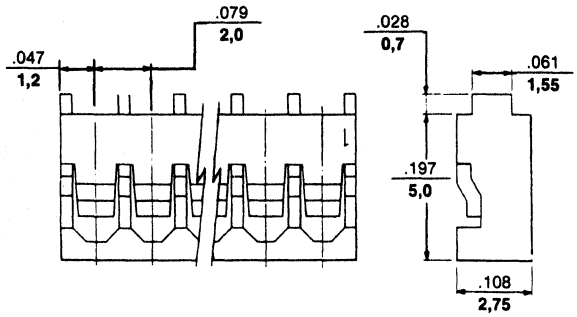
Ordering Information

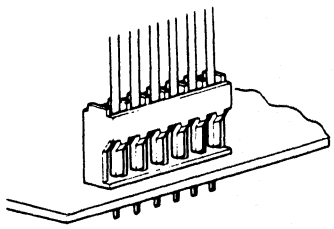
Order No.	Terminal	Automatic Tooling		Hand Tool
		Press	Crimp Die	
5378T	Chain	M15A	57007-3000	57050-5000
5378TL	Loose			

5379-N Series

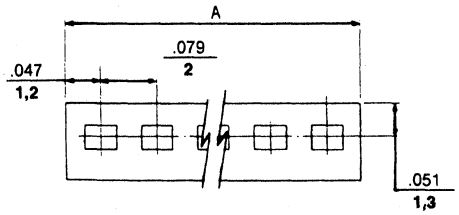
Housing

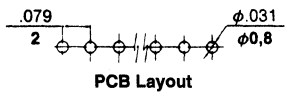
- Nylon 6/6, UL 94V-0
- 2-15 circuits
- Accepts terminal 5378





Inch / mm





PCB Layout

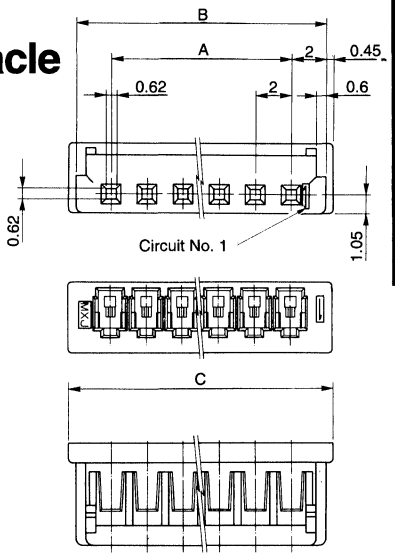
Ordering Information and Dimensions

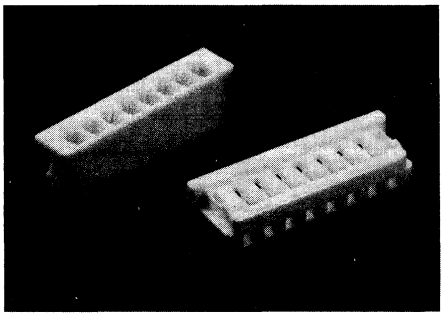
Circuits	Order No.	Dim. A	Circuits	Order No.	Dim. A
2	5379-02	.173 **4,4**	9	5379-09	.724 **18,4**
3	5379-03	.252 **6,4**	10	5379-10	.803 **20,4**
4	5379-04	.331 **8,4**	11	5379-11	.882 **22,4**
5	5379-05	.409 **10,4**	12	5379-12	.961 **24,4**
6	5379-06	.488 **12,4**	13	5379-13	1.039 **26,4**
7	5379-07	.567 **14,4**	14	5379-14	1.118 **28,4**
8	5379-08	.646 **16,4**	15	5379-15	1.197 **30,4**

2.0mm .079" Center Mi II System™ Wire-to-Board Connectors

51090 Series
Single Row Crimp Receptacle

- Housing: PBT, UL 94V-0
- 2-15 circuits
- Accepts terminal 50212
- Mates with: 53324
  53325



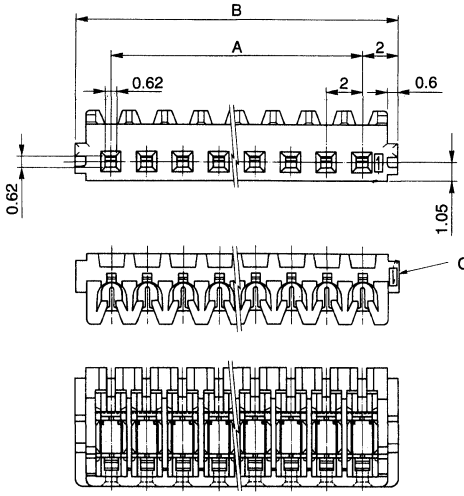


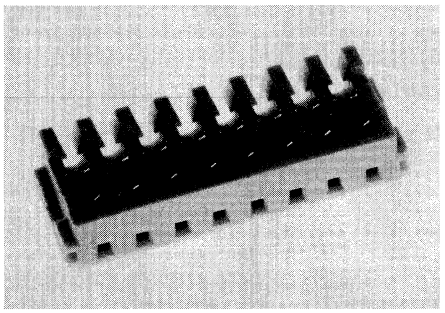
Ordering Information and Dimensions in mm

Circuits	Order No.	Dim. A	Dim. B	Dim. C	Circuits	Order No.	Dim. A	Dim. B	Dim. C
2	51090-0200	2.0	6.0	6.9	9	51090-0900	16.0	20.0	20.9
3	51090-0300	4.0	8.0	8.9	10	51090-1000	18.0	22.0	22.9
4	51090-0400	6.0	10.0	10.9	11	51090-1100	20.0	24.0	24.9
5	51090-0500	8.0	12.0	12.9	12	51090-1200	22.0	26.0	26.9
6	51090-0600	10.0	14.0	14.9	13	51090-1300	24.0	28.0	28.9
7	51090-0700	12.0	16.0	16.9	14	51090-1400	26.0	30.0	30.9
8	51090-0800	14.0	18.0	18.9	15	51090-1500	28.0	32.0	32.9

52484 Series
Single Row IDT Receptacle

- Housing: Glass filled nylon 6/6, UL 94V-0
- Tin plated phosphor bronze terminals
- Wire range: AWG #26 - #28
- Insulation diameter: 0.85mm - 1.0mm
- Mates with: 53324
  53325
  53313 (51094)





Ordering Information and Dimensions in mm

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	52484-0210	2.0	6.0	9	52484-0910	16.0	20.0
3	52484-0310	4.0	8.0	10	52484-1010	18.0	22.0
4	52484-0410	6.0	10.0	11	52484-1110	20.0	24.0
5	52484-0510	8.0	12.0	12	52484-1210	22.0	26.0
6	52484-0610	10.0	14.0	13	52484-1310	24.0	28.0
7	52484-0710	12.0	16.0	14	52484-1410	26.0	30.0
8	52484-0810	14.0	18.0	15	52484-1510	28.0	32.0

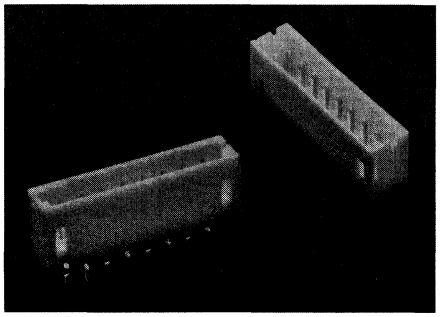
Contact factory for fully automatic IDT machine: IDT Press Order No. 57222-7000 Die Set: 57220-7000

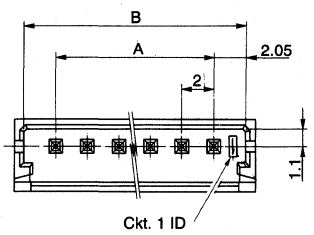
L

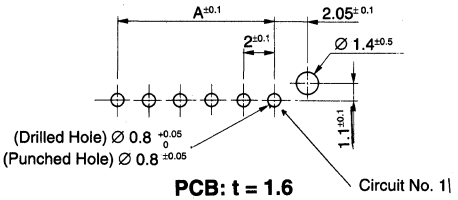
2.0mm .079" Center Mi II System™ Wire-to-Board Connectors

53324 Series
Single Row Straight Header

- Housing: Glass filled PBT, UL 94V-0
- Tin plated brass pins
- 2-15 circuits
- Mates with: 51094
  52484

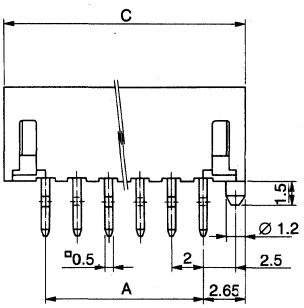


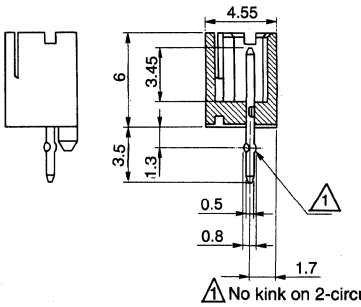




PCB: t = 1.6

PCB Layout





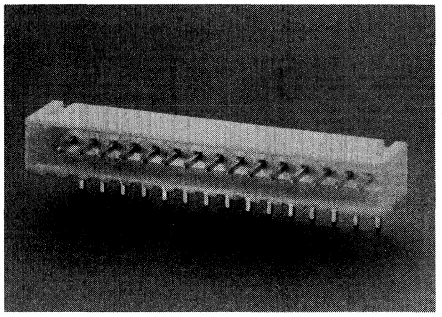
1 No kink on 2-circuit model

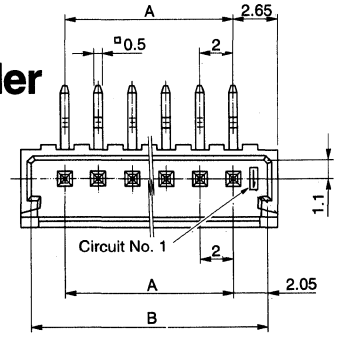
Ordering Information and Dimensions in mm

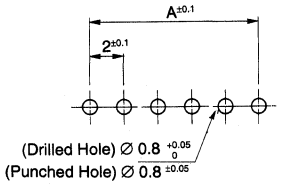
Circuits	Order No.	Dim. A	Dim. B	Dim. C	Circuits	Order No.	Dim. A	Dim. B	Dim. C
2	53324-0210	2.0	6.1	7.3	9	53324-0910	16.0	20.1	21.3
3	53324-0310	4.0	8.1	9.3	10	53324-1010	18.0	22.1	23.3
4	53324-0410	6.0	10.1	11.3	11	53324-1110	20.0	24.1	25.3
5	53324-0510	8.0	12.1	13.3	12	53324-1210	22.0	26.1	27.3
6	53324-0610	10.0	14.1	15.3	13	53324-1310	24.0	28.1	29.3
7	53324-0710	12.0	16.1	17.3	14	53324-1410	26.0	30.1	31.3
8	53324-0810	14.0	18.1	19.3	15	53324-1510	28.0	32.1	33.3

53325 Series
Single Row Right Angle Header

- Housing: Glass filled PBT, UL 94V-0
- Tin plated brass pins
- 2-15 circuits
- Mates with: 51094
  52484

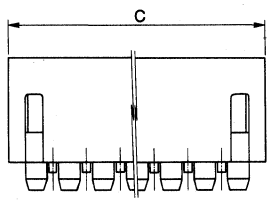


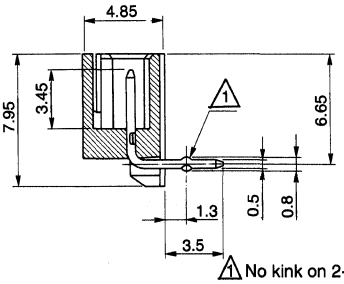




PCB: t = 1.6

PCB Layout





1 No kink on 2-circuit model

Ordering Information and Dimensions in mm

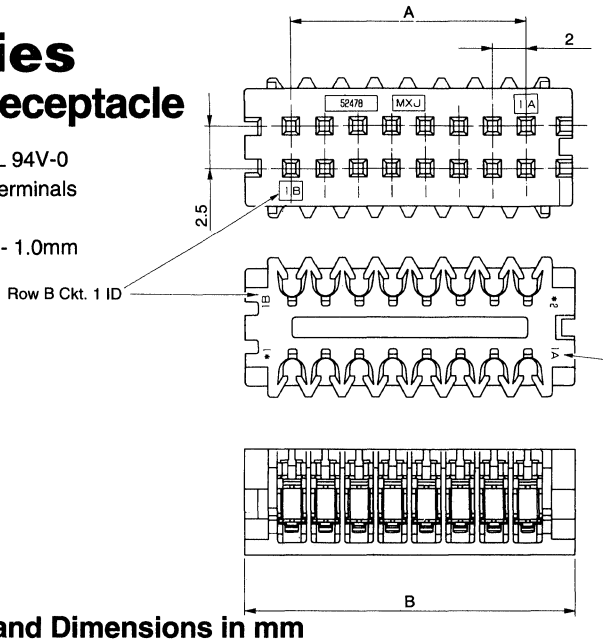
Circuits	Order No.	Dim. A	Dim. B	Dim. C	Circuits	Order No.	Dim. A	Dim. B	Dim. C
2	53325-0210	2.0	6.1	7.3	9	53325-0910	16.0	20.1	21.3
3	53325-0310	4.0	8.1	9.3	10	53325-1010	18.0	22.1	23.3
4	53325-0410	6.0	10.1	11.3	11	53325-1110	20.0	24.1	25.3
5	53325-0510	8.0	12.1	13.3	12	53325-1210	22.0	26.1	27.3
6	53325-0610	10.0	14.1	15.3	13	53325-1310	24.0	28.1	29.3
7	53325-0710	12.0	16.1	17.3	14	53325-1410	26.0	30.1	31.3
8	53325-0810	14.0	18.1	19.3	15	53325-1510	28.0	32.1	33.3

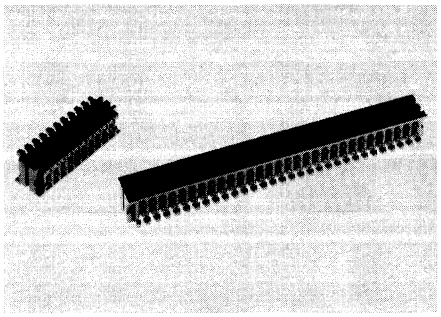
L

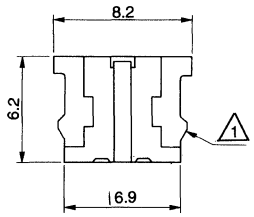
2.0mm .079" Center Mi II System™ Wire-to-Board Connectors

52478 Series
Dual Row IDT Receptacle

- Housing: Glass filled PBT, UL 94V-0
- Tin plated phosphor bronze terminals
- Wire range: AWG #26 - #28
- Insulation diameter: 0.85mm - 1.0mm
- 10-60 circuits
- Mates with: 53313
  53314







Note: 1 Friction Lock

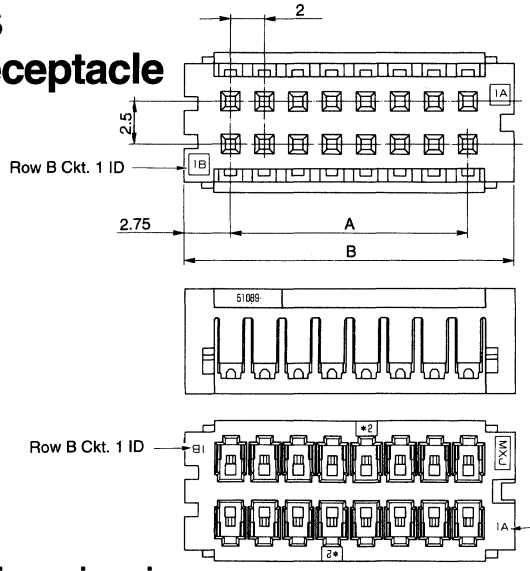
Ordering Information and Dimensions in mm

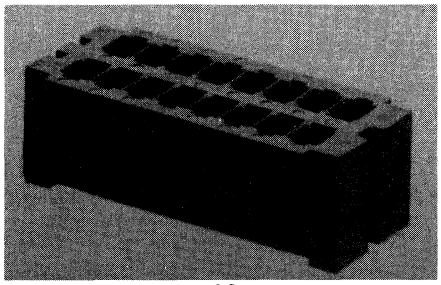
Circuits	Order No.	Dim. A	Dim. B	Lock	Circuits	Order No.	Dim. A	Dim. B	Lock
10	52478-1015	8.0	13.5	Yes	26	52478-2615	24.0	29.5	Yes
12	52478-1215	10.0	15.5	Yes	28	52478-2815	26.0	31.5	Yes
14	52478-1415	12.0	17.5	Yes	30	52478-3015	28.0	33.5	No
16	52478-1615	14.0	19.5	Yes	34	52478-3415	32.0	37.5	No
18	52478-1815	16.0	21.5	Yes	40	52478-4015	38.0	43.5	No
20	52478-2015	18.0	23.5	Yes	50	52478-5015	48.0	53.5	No
22	52478-2215	20.0	25.5	Yes	60	52478-6015	58.0	63.5	No
24	52478-2415	22.0	27.5	Yes					

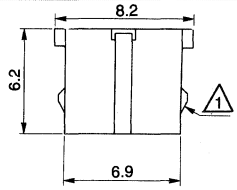
Contact factory for fully automatic IDT machine: IDT Press Order No. 57222-7000 Die Set: 57219-7000

51089 Series
Dual Row Crimp Receptacle

- Housing: Glass filled PBT, UL 94V-0
- 10-60 circuits
- Accepts terminal 50212
- Mates with: 53313
  53314







Note: 1 Friction Lock

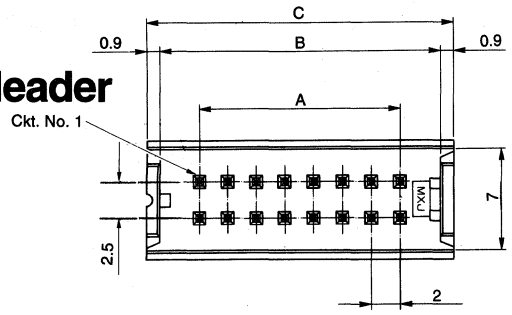
Ordering Information and Dimensions in mm

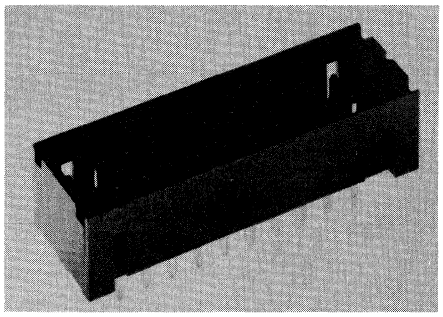
Circuits	Order No.	Dim. A	Dim. B	Lock	Circuits	Order No.	Dim. A	Dim. B	Lock
10	51089-1005	8.0	13.5	Yes	26	51089-2605	24.0	29.5	Yes
12	51089-1205	10.0	15.5	Yes	28	51089-2805	26.0	31.5	Yes
14	51089-1405	12.0	17.5	Yes	30	51089-3005	28.0	33.5	No
16	51089-1605	14.0	19.5	Yes	34	51089-3405	32.0	37.5	No
18	51089-1805	16.0	21.5	Yes	40	51089-4005	38.0	43.5	No
20	51089-2005	18.0	23.5	Yes	50	51089-5005	48.0	53.5	No
22	51089-2205	20.0	25.5	Yes	60	51089-6005	58.0	63.5	No
24	51089-2405	22.0	27.5	Yes					

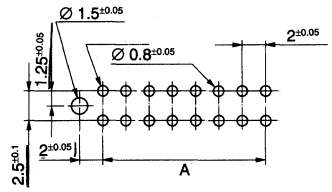
2.0mm .079" Center Mi II System™ Wire-to-Board Connectors

53313 Series
Dual Row Straight Header

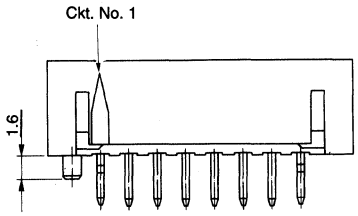
- Housing: Glass filled PBT
- Tin plated brass pins
- 6-60 circuits
- Mates with: 51089
  52478
  52478 + 51094

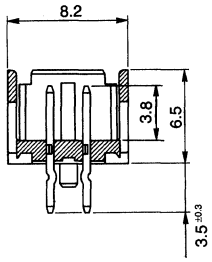






PCB: t = 1.6
PCB Layout



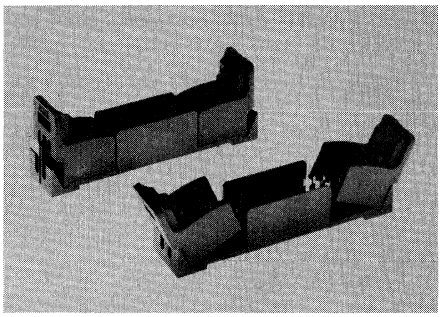


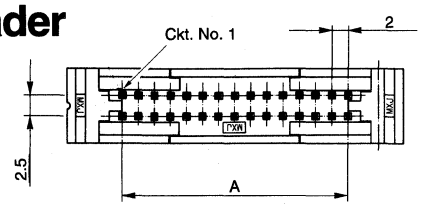
Ordering Information and Dimensions in mm

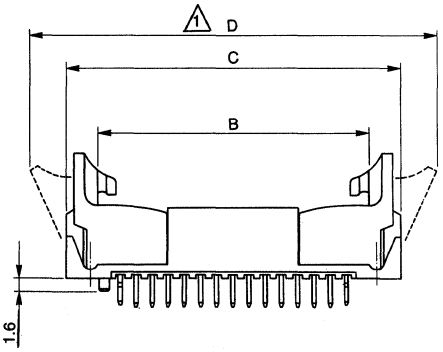
Circuits	Order No.	Dim. A	Dim. B	Dim. C	Circuits	Order No.	Dim. A	Dim. B	Dim. C
6	53313-0615	4.0	9.6	11.4	24	53313-2415	22.0	27.6	29.4
8	53313-0815	6.0	11.6	13.4	26	53313-2615	24.0	29.6	31.4
10	53313-1015	8.0	13.6	15.4	28	53313-2815	26.0	31.6	33.4
12	53313-1215	10.0	15.6	17.4	30	53313-3015	28.0	33.6	35.4
14	53313-1415	12.0	17.6	19.4	34	53313-3415	32.0	37.6	39.4
16	53313-1615	14.0	19.6	21.4	40	53313-4015	38.0	43.6	45.4
18	53313-1815	16.0	21.6	23.4	50	53313-5015	48.0	53.6	55.4
20	53313-2015	18.0	23.6	25.4	60	53313-6015	58.0	63.6	65.4
22	53313-2215	20.0	25.6	27.4					

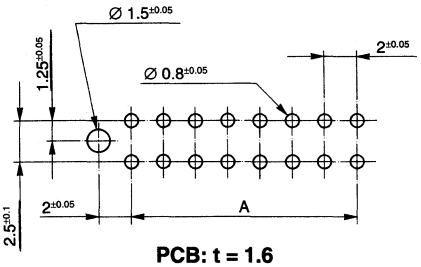
53314 Series
Dual Row Straight Header with Eject Lever

- Housing: Glass filled PBT, UL 94V-0
- Tin plated brass pins
- 30-60 circuits
- Mates with: 51089
  52478

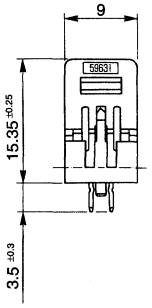








PCB: t = 1.6
PCB Layout



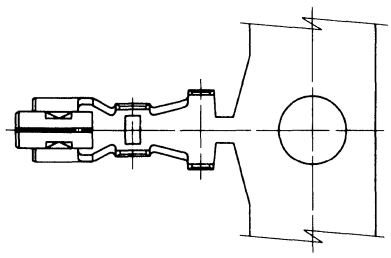
Ordering Information and Dimensions in mm

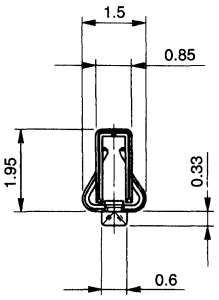
Circuits	Order No.	Dim. A	Dim. B	Dim. C	Dim. D
30	53314-3015	28.0	33.6	41.4	50.4
34	53314-3415	32.0	37.6	45.4	54.4
40	53314-4015	38.0	43.6	51.4	60.4
50	53314-5015	48.0	53.6	61.4	70.4
60	53314-6015	58.0	63.6	71.4	80.4

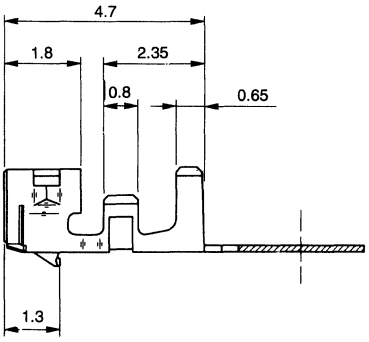
Note: ⚠1 Eject levers in fully open position

50212 Series
Crimp Terminal

- For use with AWG 24-30 wire with insulation dia. of 1.4mm max.
- Tin plated phosphor bronze
- Wire range: AWG #24 - #30
- Insulation diameter: 1.4mm max.
- Accepts housing: 51089
  51090





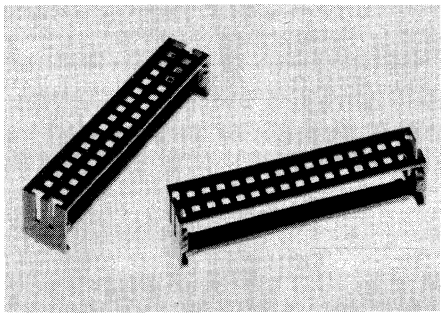


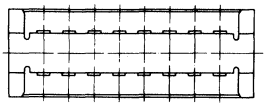
Ordering Information

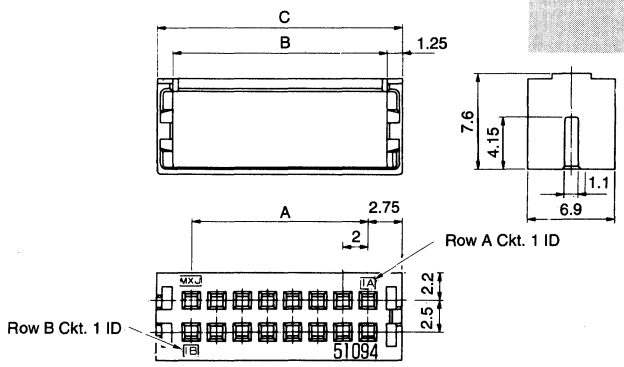
Order No.	Terminal	M15A Press	M15A Crimp Die	TM40/42 Applicator	TM40/42 Spare Tooling Kit	Mini Mac Applicator	Mini Mac Spare Tooling Kit	Hand Tool	Extraction Tool
50212-8000	Chain	57117-4000	57175-3000	11-40-2255	11-40-3259	11-18-2169	11-18-3160	—	57105-6000
50212-8100	Loose	—	—	—	—	—	—	57176-5000	

51094 Series
Clip

- PBT, UL 94V-0
- Joins two single row receptacles (53324) to mate with a dual row header (52484)
- 6-30 circuits







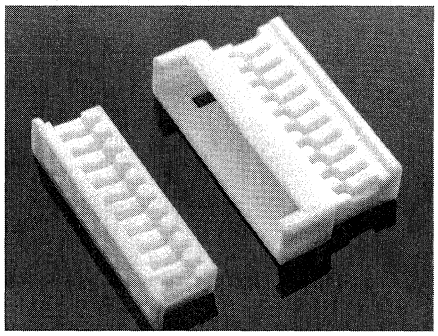
Ordering Information and Dimensions in mm

Circuits	Order No.	Dim. A	Dim. B	Dim. C	Circuits	Order No.	Dim. A	Dim. B	Dim. C
6	51094-0605	4.0	7.0	9.5	20	51094-2005	18.0	21.0	23.5
8	51094-0805	6.0	9.0	11.5	22	51094-2205	20.0	23.0	25.5
10	51094-1005	8.0	11.0	13.5	24	51094-2405	22.0	25.0	27.5
12	51094-1205	10.0	13.0	15.5	26	51094-2605	24.0	27.0	29.5
14	51094-1405	12.0	15.0	17.5	28	51094-2805	26.0	29.0	31.5
16	51094-1605	14.0	17.0	19.5	30	51094-3005	28.0	31.0	33.5
18	51094-1805	16.0	19.0	21.5					

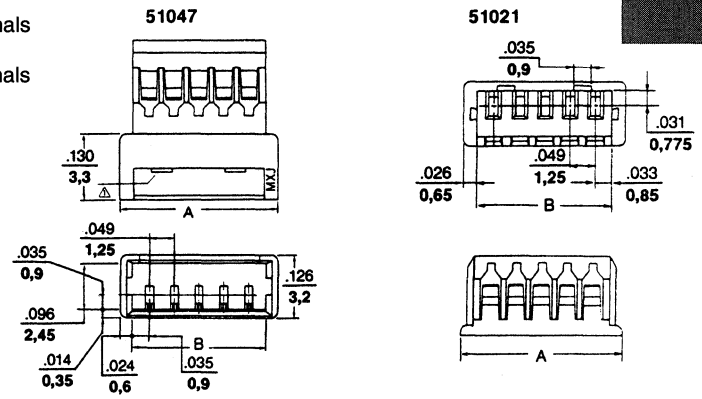
1.25mm .049" Center Wire-to-Wire System

51047 Series
Plug

51021 Series
Receptacle



- Polyester, UL 94V-0
- 2-10 circuits
- 51047-XX00 accepts terminals 50125-8X00, 50133-8X00
- 51021-XX00 accepts terminals 50079-8X00, 50058-8X00



Inch / mm

Ordering Information and Dimensions

Circuits	Order No.	Dim. A		Dim. B		Circuits	Order No.	Dim. A		Dim. B	
2	51047-0200	.167	4,25	.120	3,05	2	51021-0200	.167	4,25	.116	2,95
3	51047-0300	.217	5,50	.169	4,30	3	51021-0300	.217	5,50	.165	4,20
4	51047-0400	.268	6,75	.219	5,55	4	51021-0400	.266	6,75	.215	5,45
5	51047-0500	.315	8,00	.268	6,80	5	51021-0500	.315	8,00	.264	6,70
6	51047-0600	.364	9,25	.317	8,05	6	51021-0600	.364	9,25	.313	7,95
7	51047-0700	.413	10,50	.366	9,30	7	51021-0700	.413	10,50	.362	9,20
8	51047-0800	.463	11,75	.415	10,55	8	51021-0800	.463	11,75	.411	10,45
9	51047-0900	.512	13,00	.465	11,80	9	51021-0900	.512	13,00	.461	11,70
10	51047-1000	.561	14,25	.514	13,05	10	51021-1000	.561	14,25	.510	12,95

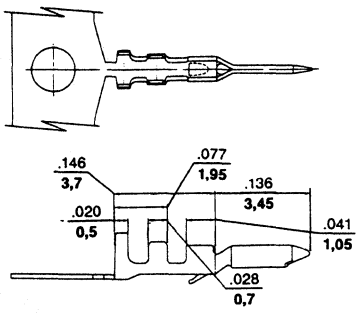
L

50125/50133 Series
Male Terminal

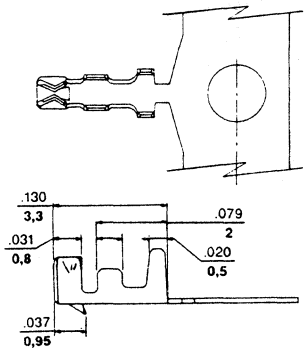
50079/50058 Series
Female Terminal

- Tin plated phosphor bronze
- Wire range: AWG #26 - #32
- Insulation diameter 1.0mm max.
- Strip length 1.4-1.9mm
- 125V, 1 amp max. (0.8 amps, AWG 32)

50125-8X00, 50133-8X00 (Male)



50079-8X00, 50058-8X00 (Female)



Order No.	Terminal	Wire Gauge	Automatic Tooling		Hand Tool	Extraction Tool
			Press	Crimp Die		
50125-8000	Chain	26-28	M15A 57117-4000	57138-3000	—	57072-6000
50133-8000		28-32			—	
50125-8100	Loose	26-28			57140-5000	
50133-8100		28-32			57139-5000	
50079-8000	Chain	26-28		57067-3000	—	
50058-8000		28-32			57177-5000	
50079-8100	Loose	26-28			—	
50058-8100		28-32			57068-5000	

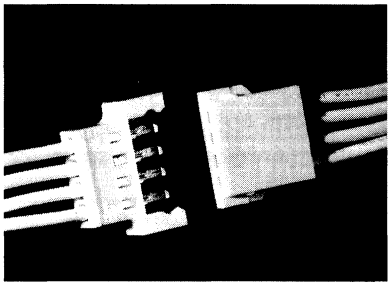
Inch / mm

NOTE: Contact factory for special application tooling instructions.

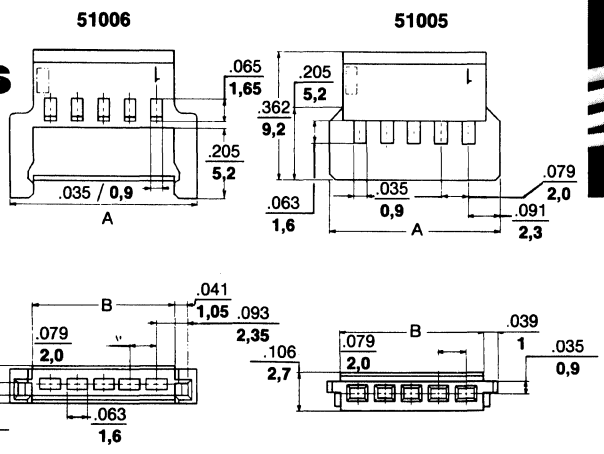
2.0mm .079" Center Wire-to-Wire System

51006 Series
Plug

51005 Series
Receptacle



- Polyester, UL 94V-0
- 2-10 circuits
- 51006-XX00 accepts terminals 50012-8X00
- 51005-XX00 accepts terminals 50013-8X00
- 2-10 circuits



Dimensions

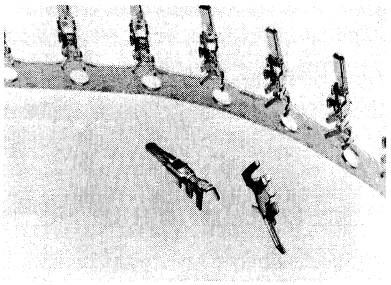
51006 - Plug									51005 - Receptacle								
Circuits	Dim. A		Dim. B		Circuits	Dim. A		Dim. B		Circuits	Dim. A		Dim. B		Circuits	Dim. A		Dim. B	
2	.315	8	.181	4,6	7	.709	18	.575	14,6	2	.260	6,6	.181	4,6	7	.654	16,6	.575	14,6
3	.394	10	.260	6,6	8	.787	20	.654	16,6	3	.339	8,6	.260	6,6	8	.732	18,6	.654	16,6
4	.472	12	.339	8,6	9	.866	22	.732	18,6	4	.417	10,6	.339	8,6	9	.811	20,6	.732	18,6
5	.551	14	.417	10,6	10	.945	24	.811	20,6	5	.496	12,6	.417	10,6	10	.890	22,6	.811	20,6
6	.630	16	.496	12,6						6	.575	14,6	.496	12,6					

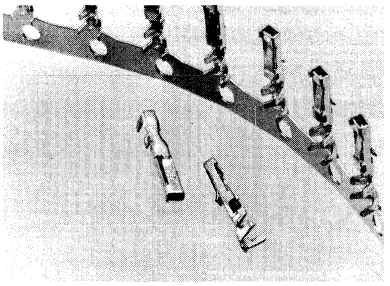
Ordering Information

Plug Order No.	Receptacle Order No.
51006-**XX**00	51005-**XX**00
Replace **XX** in Order No. with number of circuits required, 02-10	

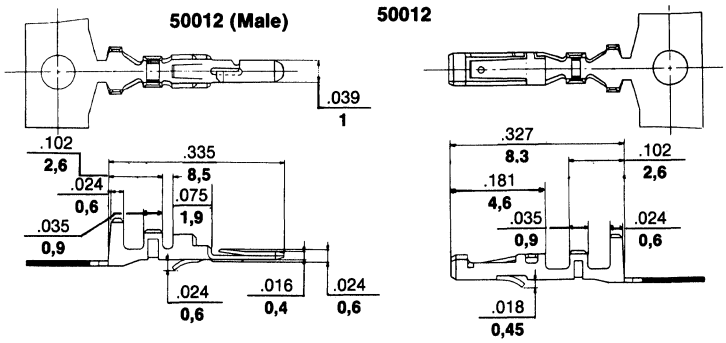
50012 Series
Male Crimp Terminal

50013 Series
Female Crimp Terminal





- Wire range: AWG #24 - #28
- Insulation diameter: 1,15mm max.
- Strip length: 1.7-2.3mm
- 125V, 2 amps max.



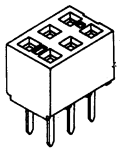
Ordering Information

Order No.	Terminal	Contact Material	Max. Current		Automatic Tooling		Hand Tool	Extraction Tool	Insertion Tool
			Amp.	Volt.	Press	Crimp Die			
50012-8000	Chain	Tin Plated Phos. Bronze	2A	125V	M15A	57045-3000	—	—	—
50013-8000									
50012-8100	Loose						57046-5000		
50013-8100									

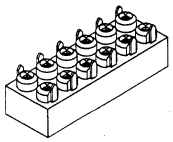
L

Milli-Grid™ 2.0mm .079" Center Connector System

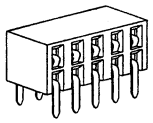
Board-To-Board Receptacles



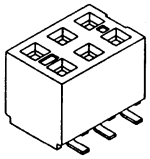
79107
Vertical
Through Hole



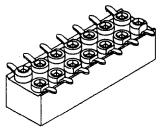
87286
Bottom Entry
Through Hole



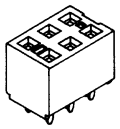
87264
Side Entry
Through Hole



79109
Vertical SMT
Top or Bottom Entry

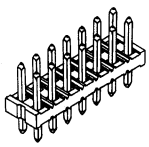


87263
Bottom Entry
SMT

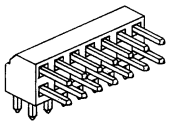


79108
FFC

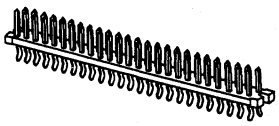
Unshrouded Headers



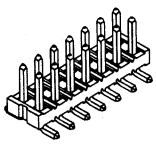
87089
Vertical
Through Hole



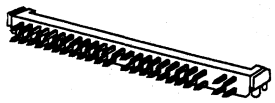
87049
Right Angle
Through Hole



87239
Straddle
Mount



87267
Vertical
SMT



87354
Edge Mount
SMT

L

Milli-Grid™ 2.0mm .079" Center Connector System

Molex's Milli-Grid family is a high density connector system designed on a 2.0mm X 2.0mm grid pattern. The system offers complete design flexibility for board-to-board connections.

The Milli-Grid family is a complete line of PCB headers and receptacles. PCB receptacles are available in top, side and bottom entry styles.

Specifications

Current Rating — 1.0A
Voltage Rating — 125V ac
Operating Temperature — -55°C to 105°C
Contact Resistance — 25 mΩ max.
Insulation Resistance — 1000 Mega Ω min.
Dielectric Withstanding Voltage — 500 V ac rms applied between terminals.

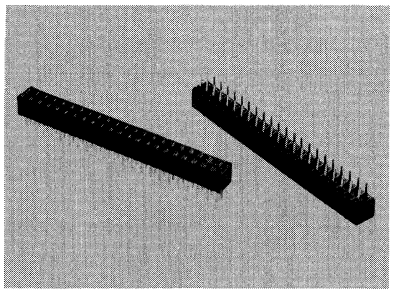
Features

- Compact design
- 4-50 circuits
- Low profile
- Phosphor bronze contacts
- Selective gold plating in contact area
- Tin-lead plated PC tails
- High temperature insulators designed to withstand IR reflow
- Variety of mounting styles — through-hole, SMT, edge mount
- Polarization options

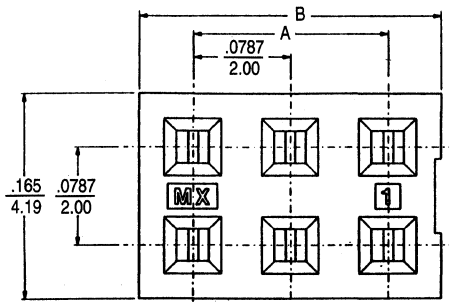
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Milli-Grid™ 2.0mm .079" Center Connector System

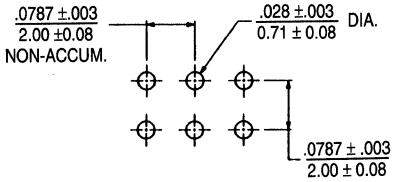
79107 Series
Vertical Through Hole Version



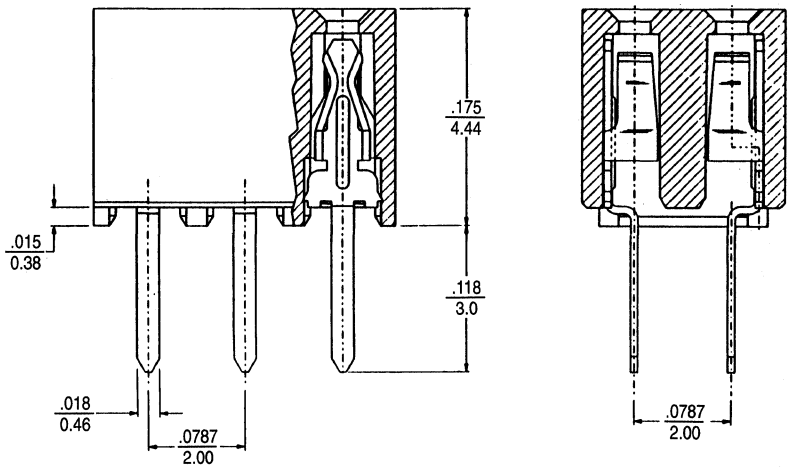
- 4-50 circuits
- High temp LCP can withstand wave solder or IR process
- Molded in void locations offered for polarization to mating connector
- Pin void locations offered for polarization to PCB
- Mates with 0.5mm square pin headers, Molex series 87089, 87049, and 87267
- Also available with .075" 1.91mm tail length



inch
mm



PCB Layout



L

Ordering Information and Dimensions

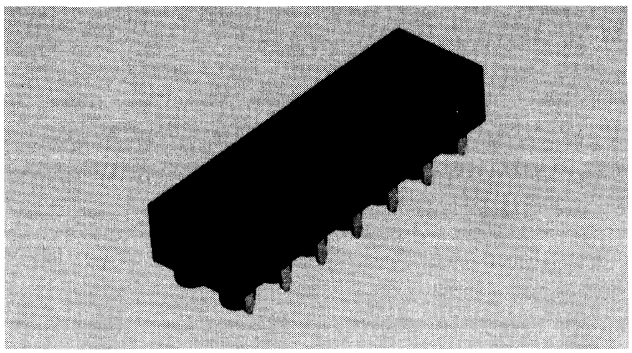
Circuits	Plating	Order No.	Dim. A	Dim. B	Circuits	Plating	Order No.	Dim. A	Dim. B
4	1	• 79107-0001	.079	.165	28	1	• 79107-0013	1.024	1.110
	2	• 79107-0051	**2,00**	**4,19**		2	• 79107-0063	**26,00**	**28,19**
6	1	• 79107-0002	.157	.244	30	1	• 79107-0014	1.102	1.188
	2	• 79107-0052	**4,00**	**6,19**		2	• 79107-0064	**28,00**	**30,19**
8	1	• 79107-0003	.236	.322	32	1	• 79107-0015	1.181	1.267
	2	• 79107-0053	**6,00**	**8,19**		2	• 79107-0065	**30,00**	**32,19**
10	1	• 79107-0004	.315	.401	34	1	• 79107-0016	1.260	1.346
	2	• 79107-0054	**8,00**	**10,19**		2	• 79107-0066	**32,00**	**34,19**
12	1	• 79107-0005	.394	.480	36	1	• 79107-0017	1.338	1.425
	2	• 79107-0055	**10,00**	**12,19**		2	• 79107-0067	**34,00**	**36,19**
14	1	• 79107-0006	.472	.559	38	1	• 79107-0018	1.417	1.504
	2	• 79107-0056	**12,00**	**14,19**		2	• 79107-0068	**36,00**	**38,19**
16	1	• 79107-0007	.551	.637	40	1	• 79107-0019	1.496	1.582
	2	• 79107-0057	**14,00**	**16,19**		2	• 79107-0069	**38,00**	**40,19**
18	1	• 79107-0008	.630	.716	42	1	• 79107-0020	1.575	1.661
	2	• 79107-0058	**16,00**	**18,19**		2	• 79107-0070	**40,00**	**42,19**
20	1	• 79107-0009	.709	.795	44	1	• 79107-0021	1.654	1.740
	2	• 79107-0059	**18,00**	**20,19**		2	• 79107-0071	**42,00**	**44,19**
22	1	• 79107-0010	.787	.874	46	1	• 79107-0022	1.732	1.818
	2	• 79107-0060	**20,00**	**22,19**		2	• 79107-0072	**44,00**	**46,19**
24	1	• 79107-0011	.866	.952	48	1	• 79107-0023	1.811	1.897
	2	• 79107-0061	**22,00**	**24,19**		2	• 79107-0073	**46,00**	**48,19**
26	1	• 79107-0012	.945	1.031	50	1	• 79107-0024	1.890	1.976
	2	• 79107-0062	**24,00**	**26,19**		2	• 79107-0074	**48,00**	**50,19**

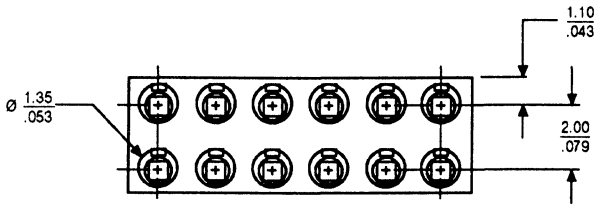
Plating 1: 15 microinches min. gold plate in selected area and 75 microinches min. tin/lead (90/10) in selected area, over 50 microinches min. nickel overall.
Plating 2: 30 microinches min. gold in select area and 75 microinches min. tin/lead (90/10) in selected area, over 50 microinches nickel overall.
•U.S. Standard Product, available through Molex franchised distributors

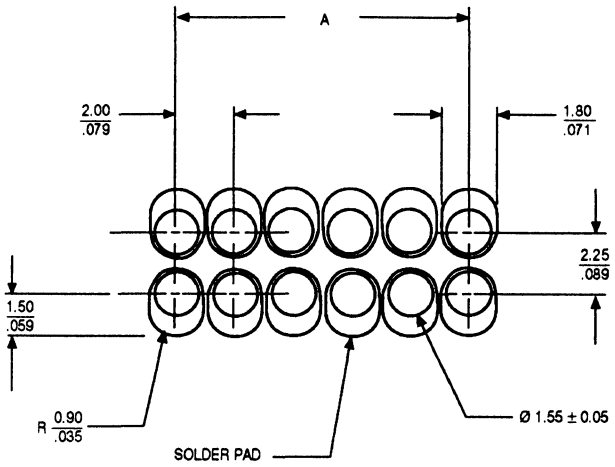
Milli-Grid™ 2.0mm .079" Center Connector System

87286 Series
Bottom Entry Receptacle

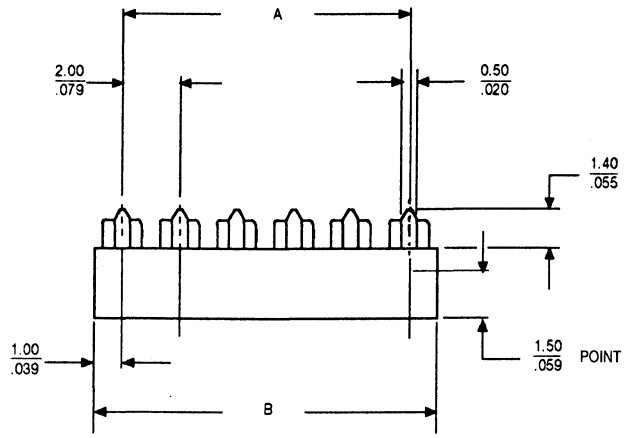
- 4-30 circuits
- High temp nylon, UL 94V-0, black
- Phosphor bronze terminals
- For PCB thickness 0.80 ± 0.10mm
- Mates with 0.5mm square pin headers
- Tube packaging

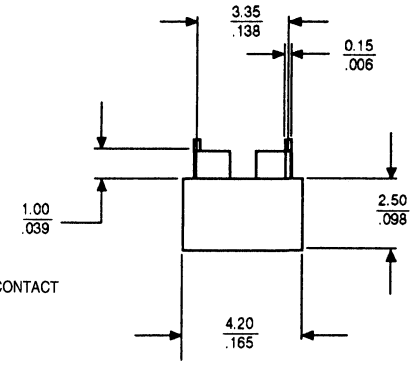






PCB Layout





MINIMUM MATING LENGTH IS
2.50mm + CUSTOMER PCB THICKNESS

mm
inch

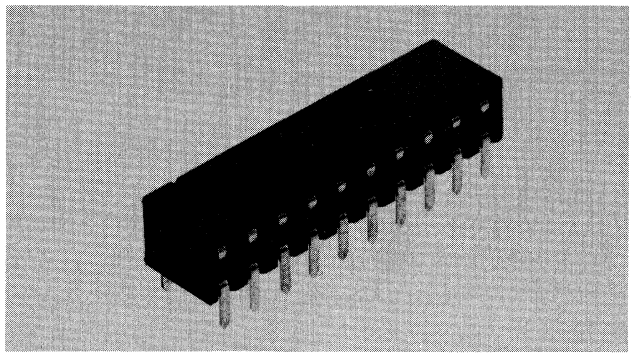
Ordering Information and Dimensions

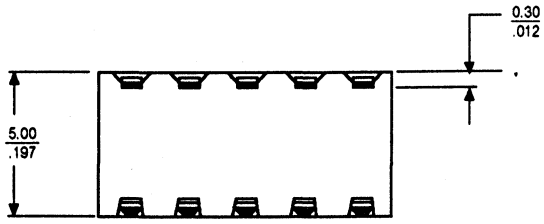
Circuits	15µin Select Gold Order No.	30µin Select Gold Order No.	Dim. A mm	Dim. B mm	Circuits	15µin Select Gold Order No.	30µin Select Gold Order No.	Dim. A mm	Dim. B mm
4	87286-0401	87286-0402	2.00	4.00	18	87286-1801	87286-1802	16.00	18.00
6	87286-0601	87286-0602	4.00	6.00	20	87286-2001	87286-2002	18.00	20.00
8	87286-0801	87286-0802	6.00	8.00	22	87286-2201	87286-2202	20.00	22.00
10	87286-1001	87286-1002	8.00	10.00	24	87286-2401	87286-2402	22.00	24.00
12	87286-1201	87286-1202	10.00	12.00	26	87286-2601	87286-2602	24.00	26.00
14	87286-1401	87286-1402	12.00	14.00	28	87286-2801	87286-2802	26.00	28.00
16	87286-1601	87286-1602	14.00	16.00	30	87286-3001	87286-3002	28.00	30.00

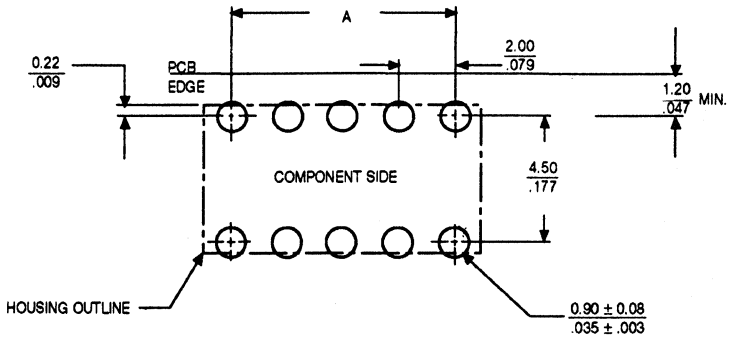
Milli-Grid™ 2.0mm .079" Center Connector System

87264 Series
Side Entry Receptacle

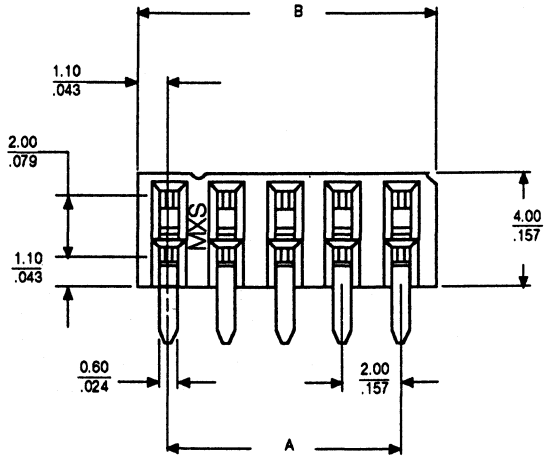
- 6-50 circuits
- High temp nylon, UL 94V-0, black
- Phosphor bronze terminals
- For PCB thickness 1.60 ± 0.10mm
- Mates with 0.5mm square pin headers
- Tube packaging

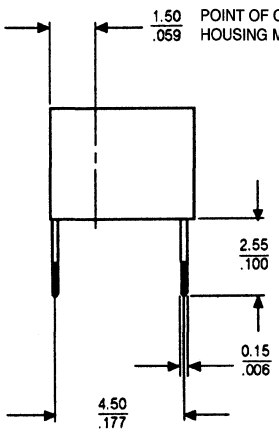






PCB Layout





MINIMUM MATING LENGTH: 2.50mm
MAXIMUM MATING LENGTH: 4.20mm

mm
inch

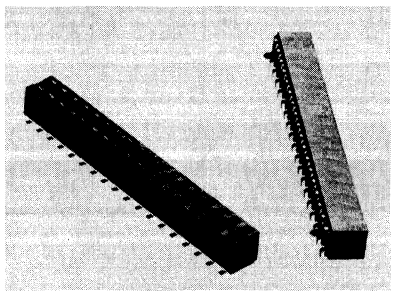
Ordering Information and Dimensions

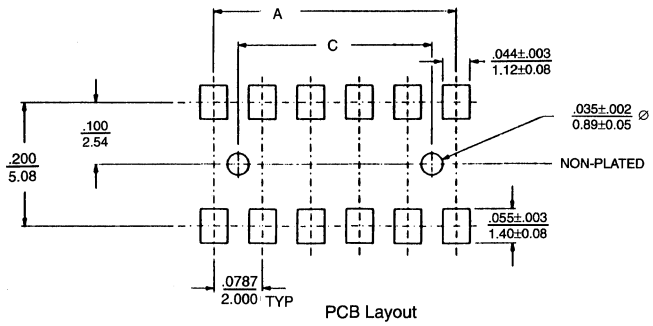
Circuits	15µin Select Gold	30µin Select Gold	Dim. A	Dim. B	Circuits	15µin Select Gold	30µin Select Gold	Dim. A	Dim. B
	Order No.	Order No.	mm	mm		Order No.	Order No.	mm	mm
6	87264-0650	87264-0651	4.00	6.20	30	87264-3050	87264-3051	28.00	30.20
8	87264-0850	87264-0851	6.00	8.20	32	87264-3250	87264-3251	30.00	32.20
10	87264-1050	87264-1051	8.00	10.20	34	87264-3450	87264-3451	32.00	34.20
12	87264-1250	87264-1251	10.00	12.20	36	87264-3650	87264-3651	34.00	36.20
14	87264-1450	87264-1451	12.00	14.20	38	87264-3850	87264-3851	36.00	38.20
16	87264-1650	87264-1651	14.00	16.20	40	87264-4050	87264-4051	38.00	40.20
18	87264-1850	87264-1851	16.00	18.20	42	87264-4250	87264-4251	40.00	42.20
20	87264-2050	87264-2051	18.00	20.20	44	87264-4450	87264-4451	42.00	44.20
22	87264-2250	87264-2251	20.00	22.20	46	87264-4650	87264-4651	44.00	46.20
24	87264-2450	87264-2451	22.00	24.20	48	87264-4850	87264-4851	46.00	48.20
26	87264-2650	87264-2651	24.00	26.20	50	87264-5050	87264-5051	48.00	50.20
28	87264-2850	87264-2851	26.00	28.20					

Milli-Grid™ 2.0mm .079" Center Connector System

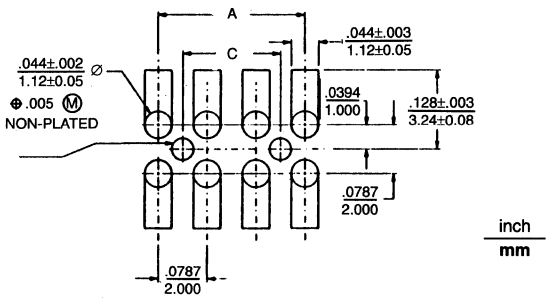
79109 Series
Vertical SMT Version
Top or Bottom Entry, with Pegs

- 4-50 circuits
- High temp LCP can withstand wave solder or IR process
- Molded-in void locations offered for polarization to mating connector
- Can be used as either a top or bottom entry receptacle
- Mates with 0.5mm square pin headers, Molex series 87089, 87049, and 87267





PCB Layout



Bottom Entry Layout

Ordering Information and Dimensions

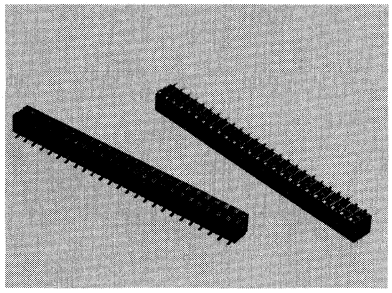
Circuits	Plating	Order No.	Dim. A	Dim. B	Dim. C	Circuits	Plating	Order No.	Dim. A	Dim. B	Dim. C
4	1	•79109-0201	.079	.165	—	28	1	•79109-0213	1.024	1.110	.945
	2	•79109-0251	**2,00**	**4,19**	—		2	•79109-0263	**26,00**	**28,19**	**24,00**
6	1	•79109-0202	.157	.244	.079	30	1	•79109-0214	1.102	1.188	1.024
	2	•79109-0252	**4,00**	**6,19**	**2,00**		2	•79109-0264	**28,00**	**30,19**	**26,00**
8	1	•79109-0203	.236	.322	.157	32	1	•79109-0215	1.181	1.267	1.102
	2	•79109-0253	**6,00**	**8,19**	**4,00**		2	•79109-0265	**30,00**	**32,19**	**28,00**
10	1	•79109-0204	.315	.401	.236	34	1	•79109-0216	1.260	1.346	1.181
	2	•79109-0254	**8,00**	**10,19**	**6,00**		2	•79109-0266	**32,00**	**34,19**	**30,00**
12	1	•79109-0205	.394	.480	.315	36	1	•79109-0217	1.338	1.425	1.260
	2	•79109-0255	**10,00**	**12,19**	**8,00**		2	•79109-0267	**34,00**	**36,19**	**32,00**
14	1	•79109-0206	.472	.559	.394	38	1	•79109-0218	1.417	1.504	1.338
	2	•79109-0256	**12,00**	**14,19**	**10,00**		2	•79109-0268	**36,00**	**38,19**	**34,00**
16	1	•79109-0207	.551	.637	.472	40	1	•79109-0219	1.496	1.582	1.417
	2	•79109-0257	**14,00**	**16,19**	**12,00**		2	•79109-0269	**38,00**	**40,19**	**36,00**
18	1	•79109-0208	.630	.716	.551	42	1	•79109-0220	1.575	1.661	1.496
	2	•79109-0258	**16,00**	**18,19**	**14,00**		2	•79109-0270	**40,00**	**42,19**	**38,00**
20	1	•79109-0209	.709	.795	.630	44	1	•79109-0221	1.654	1.740	1.575
	2	•79109-0259	**18,00**	**20,19**	**16,00**		2	•79109-0271	**42,00**	**44,19**	**40,00**
22	1	•79109-0210	.787	.874	.709	46	1	•79109-0222	1.732	1.818	1.654
	2	•79109-0260	**20,00**	**22,19**	**18,00**		2	•79109-0272	**44,00**	**46,19**	**42,00**
24	1	•79109-0211	.866	.952	.787	48	1	•79109-0223	1.811	1.897	1.732
	2	•79109-0261	**22,00**	**24,19**	**20,00**		2	•79109-0273	**46,00**	**48,19**	**44,00**
26	1	•79109-0212	.945	1.031	.866	50	1	•79109-0224	1.890	1.976	1.811
	2	•79109-0262	**24,00**	**26,19**	**22,00**		2	•79109-0274	**48,00**	**50,19**	**46,00**

Plating 1: 15 microinches min. gold plate in selected area and 75 microinches min. tin/lead (90/10) in selected area, over 50 microinches min. nickel overall.
Plating 2: 30 microinches min. gold plate in selected area and 75 microinches min. tin/lead (90/10) in selected area, over 50 microinches min. nickel overall.

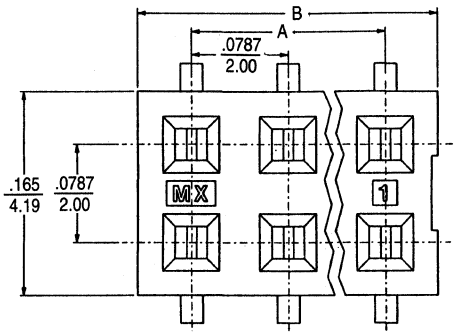
•U.S. Standard Product, available through Molex franchised distributors

Milli-Grid™ 2.0mm .079" Center Connector System

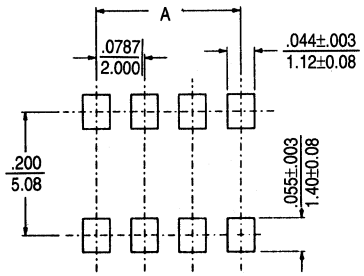
79109 Series
Vertical SMT Version
Top or Bottom Entry, without Pegs



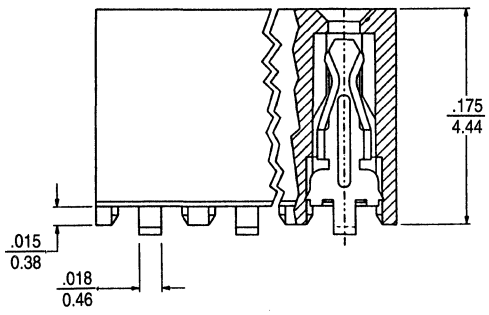
- 4-50 circuits
- High temp LCP can withstand wave solder or IR process
- Molded in void locations offered for polarization to mating connector
- Can be used as either a top or bottom entry receptacle
- For optional hold down pegs, see previous page
- Mates with 0.5mm square pin headers, Molex series 87089, 87049, and 87267

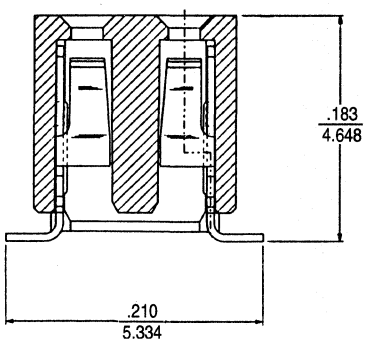


inch
mm



PCB Layout





L

Ordering Information and Dimensions

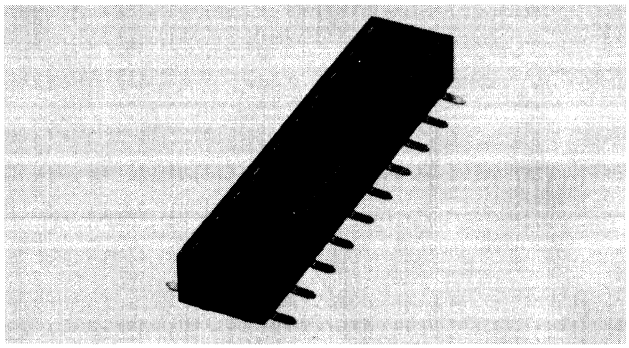
Circuits	Plating	Order No.	Dim. A	Dim. B	Circuits	Plating	Order No.	Dim. A	Dim. B
4	1	• 79109-0001	.079	.165	28	1	• 79109-0013	1.024	1.110
	2	• 79109-0051	**2,00**	**4,19**		2	• 79109-0063	**26,00**	**28,19**
6	1	• 79109-0002	.157	.244	30	1	• 79109-0014	1.102	1.188
	2	• 79109-0052	**4,00**	**6,19**		2	• 79109-0064	**28,00**	**30,19**
8	1	• 79109-0003	.236	.322	32	1	• 79109-0015	1.181	1.267
	2	• 79109-0053	**6,00**	**8,19**		2	• 79109-0065	**30,00**	**32,19**
10	1	• 79109-0004	.315	.401	34	1	• 79109-0016	1.260	1.346
	2	• 79109-0054	**8,00**	**10,19**		2	• 79109-0066	**32,00**	**34,19**
12	1	• 79109-0005	.394	.480	36	1	• 79109-0017	1.338	1.425
	2	• 79109-0055	**10,00**	**12,19**		2	• 79109-0067	**34,00**	**36,19**
14	1	• 79109-0006	.472	.559	38	1	• 79109-0018	1.417	1.504
	2	• 79109-0056	**12,00**	**14,19**		2	• 79109-0068	**36,00**	**38,19**
16	1	• 79109-0007	.551	.637	40	1	• 79109-0019	1.496	1.582
	2	• 79109-0057	**14,00**	**16,19**		2	• 79109-0069	**38,00**	**40,19**
18	1	• 79109-0008	.630	.716	42	1	• 79109-0020	1.575	1.661
	2	• 79109-0058	**16,00**	**18,19**		2	• 79109-0070	**40,00**	**42,19**
20	1	• 79109-0009	.709	.795	44	1	• 79109-0021	1.654	1.740
	2	• 79109-0059	**18,00**	**20,19**		2	• 79109-0071	**42,00**	**44,19**
22	1	• 79109-0010	.787	.874	46	1	• 79109-0022	1.732	1.818
	2	• 79109-0060	**20,00**	**22,19**		2	• 79109-0072	**44,00**	**46,19**
24	1	• 79109-0011	.866	.952	48	1	• 79109-0023	1.811	1.897
	2	• 79109-0061	**22,00**	**24,19**		2	• 79109-0073	**46,00**	**48,19**
26	1	• 79109-0012	.945	1.031	50	1	• 79109-0024	1.890	1.976
	2	• 79109-0062	**24,00**	**26,19**		2	• 79109-0074	**48,00**	**50,19**

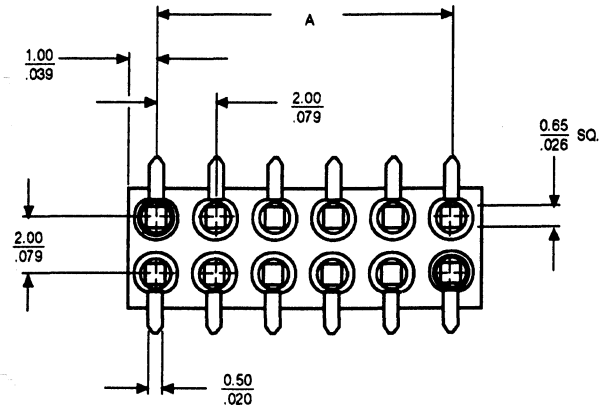
Plating 1: 15 microinches min. gold plate in selected area and 75 microinches min. tin/lead (90/10) in selected area, over 50 microinches min. nickel overall.
Plating 2: 30 microinches min. gold plate in selected area and 75 microinches min. tin/lead (90/10) in selected area, over 50 microinches min. nickel overall.
• U.S. Standard Product, available through Molex franchised distributors

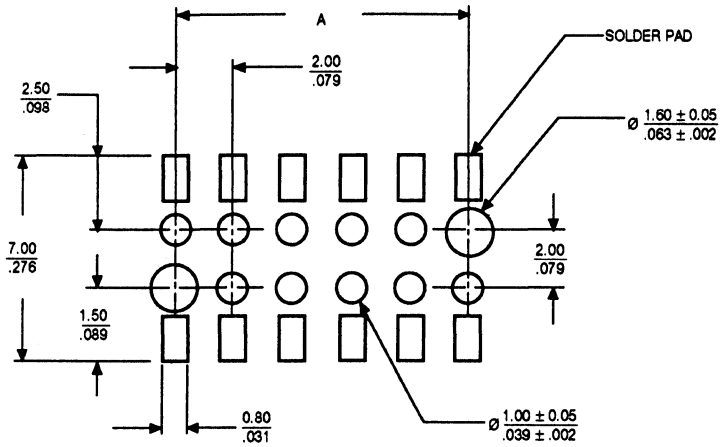
Milli-Grid™ 2.0mm .079" Center Connector System

87263 Series
SMT Bottom Entry Receptacle

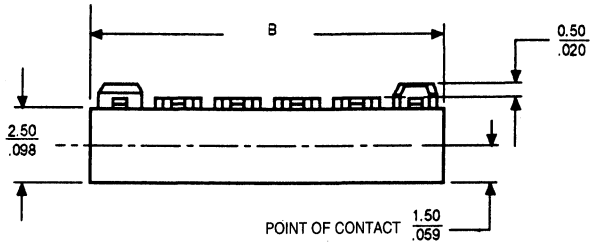
- 4-30 circuits
- High temp nylon, UL 94V-0, black
- Phosphor bronze terminals
- Locating peg version standard
- Mates with 0.5mm square pin headers
- Tube packaging
- Options: - Without peg version
  - 4.55mm profile height version



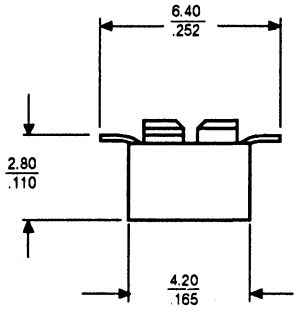




PCB Layout



MINIMUM MATING LENGTH IS
2.50MM + CUSTOMER PCB THICKNESS



mm
inch

L

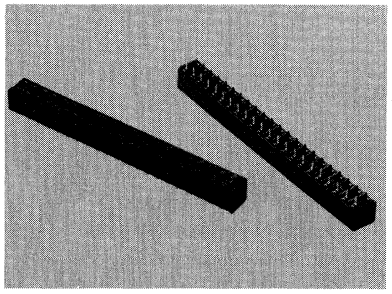
Ordering Information and Dimensions in mm

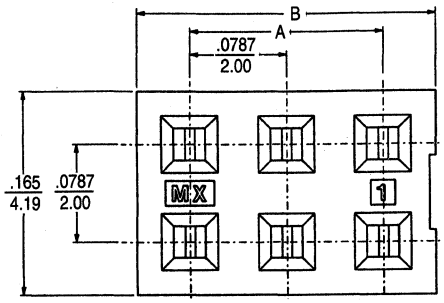
Circuits	15µin Select Gold	30µin Select Gold	Dim. A	Dim. B	Circuits	15 µin Select Gold	30µin Select Gold	Dim. A	Dim. B
	Order No.	Order No.	mm	mm		Order No.	Order No.	mm	mm
4	87263-0420	87263-0422	2.00	4.00	18	87263-1820	87263-1822	16.00	18.00
6	87263-0620	87263-0622	4.00	6.00	20	87263-2020	87263-2022	18.00	20.00
8	87263-0820	87263-0822	6.00	8.00	22	87263-2220	87263-2222	20.00	22.00
10	87263-1020	87263-1022	8.00	10.00	24	87263-2420	87263-2422	22.00	24.00
12	87263-1220	87263-1222	10.00	12.00	26	87263-2620	87263-2622	24.00	26.00
14	87263-1420	87263-1422	12.00	14.00	28	87263-2820	87263-2822	26.00	28.00
16	87263-1620	87263-1622	14.00	16.00	30	87263-3020	87263-3022	28.00	30.00

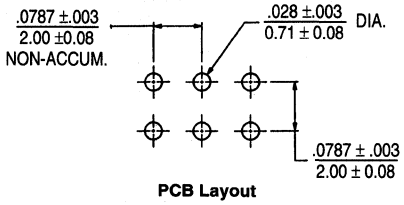
Milli-Grid™ 2.0mm .079" Center Connector System

79108 Series
FFC Version

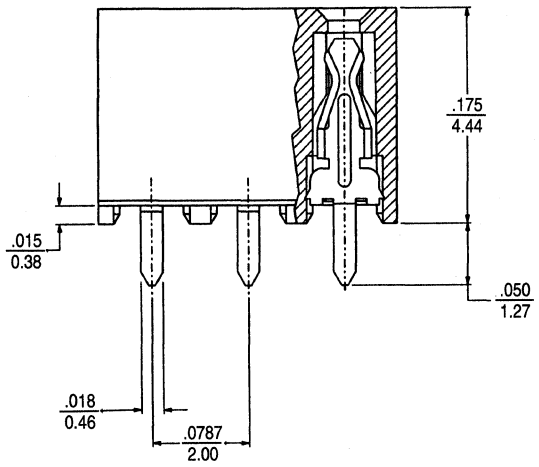
- 4-50 circuits
- High temp LCP can withstand wave solder or IR process
- Molded-in void locations offered for polarization to mating connector
- Pin void location offered for polarization to FFC assembly
- Mates with 0.5mm square pin headers, Molex series 87089, 87049, and 87267

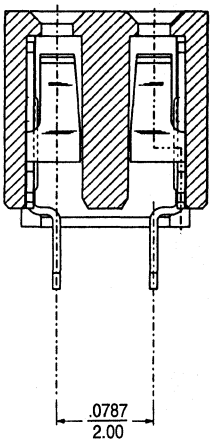






PCB Layout





inch / mm

L

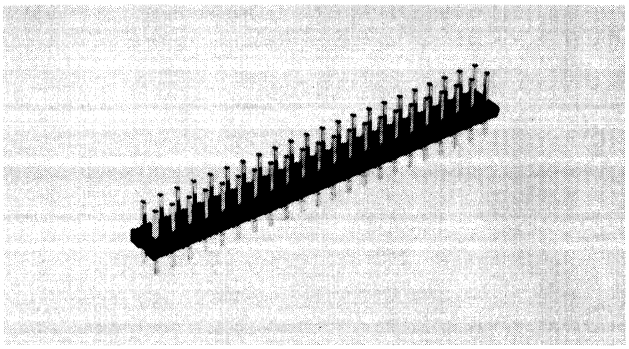
Ordering Information and Dimensions

Circuits	Plating	Order No.	Dim. A	Dim. B	Circuits	Plating	Order No.	Dim. A	Dim. B
4	1	• 79108-0001	.079	.165	28	1	• 79108-0013	1.024	1.110
	2	• 79108-0051	**2,00**	**4,19**		2	• 79108-0063	**26,00**	**28,19**
6	1	• 79108-0002	.157	.244	30	1	• 79108-0014	1.102	1.188
	2	• 79108-0052	**4,00**	**6,19**		2	• 79108-0064	**28,00**	**30,19**
8	1	• 79108-0003	.236	.322	32	1	• 79108-0015	1.181	1.267
	2	• 79108-0053	**6,00**	**8,19**		2	• 79108-0065	**30,00**	**32,19**
10	1	• 79108-0004	.315	.401	34	1	• 79108-0016	1.260	1.346
	2	• 79108-0054	**8,00**	**10,19**		2	• 79108-0066	**32,00**	**34,19**
12	1	• 79108-0005	.394	.480	36	1	• 79108-0017	1.338	1.425
	2	• 79108-0055	**10,00**	**12,19**		2	• 79108-0067	**34,00**	**36,19**
14	1	• 79108-0006	.472	.559	38	1	• 79108-0018	1.417	1.504
	2	• 79108-0056	**12,00**	**14,19**		2	• 79108-0068	**36,00**	**38,19**
16	1	• 79108-0007	.551	.637	40	1	• 79108-0019	1.496	1.582
	2	• 79108-0057	**14,00**	**16,19**		2	• 79108-0069	**38,00**	**40,19**
18	1	• 79108-0008	.630	.716	42	1	• 79108-0020	1.575	1.661
	2	• 79108-0058	**16,00**	**18,19**		2	• 79108-0070	**40,00**	**42,19**
20	1	• 79108-0009	.709	.795	44	1	• 79108-0021	1.654	1.740
	2	• 79108-0059	**18,00**	**20,19**		2	• 79108-0071	**42,00**	**44,19**
22	1	• 79108-0010	.787	.874	46	1	• 79108-0022	1.732	1.818
	2	• 79108-0060	**20,00**	**22,19**		2	• 79108-0072	**44,00**	**46,19**
24	1	• 79108-0011	.866	.952	48	1	• 79108-0023	1.811	1.897
	2	• 79108-0061	**22,00**	**24,19**		2	• 79108-0073	**46,00**	**48,19**
26	1	• 79108-0012	.945	1.031	50	1	• 79108-0024	1.890	1.976
	2	• 79108-0062	**24,00**	**26,19**		2	• 79108-0074	**48,00**	**50,19**

Plating 1: 15 microinches min. gold plate in selected area and 75 microinches min. tin/lead (90/10) in selected area, over 50 microinches min. nickel overall.
Plating 2: 30 microinches min. gold plate in selected area and 75 microinches min. tin/lead (90/10) in selected area, over 50 microinches min. nickel overall.
• U.S. Standard Product, available through Molex franchised distributors

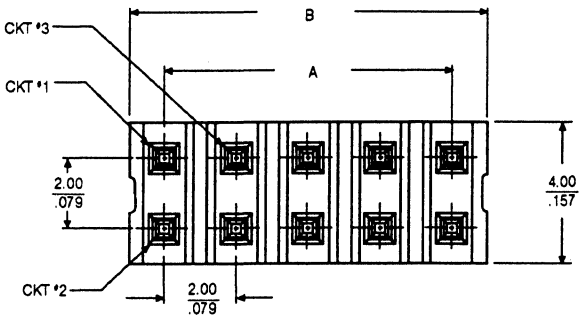
Milli-Grid™ 2.0mm .079" Center Connector System

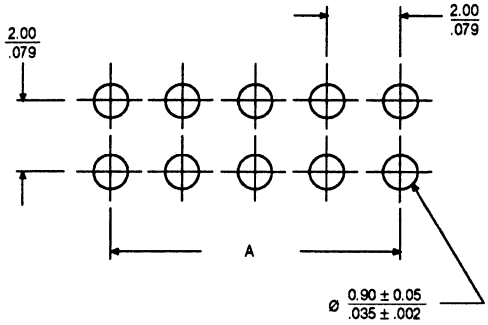
87089 Series
Vertical Header



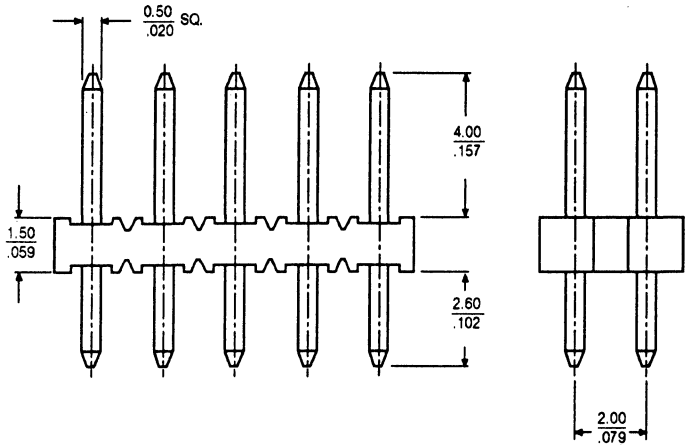
- 4-50 circuits
- Glass filled polyester, UL 94V-0, black
- 0.5mm square phosphor bronze pins
- End-to-end stackable
- For PCB thickness 1.60 ± 0.10mm
- Bulk packaging
- Mates with Milli-Grid 2.0mm receptacles

Options: - Void pin version
- Kinked PC tail





PCB Layout



mm
inch

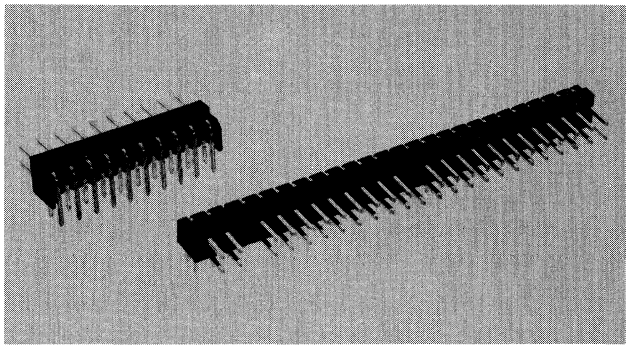
L

Ordering Information and Dimensions in mm

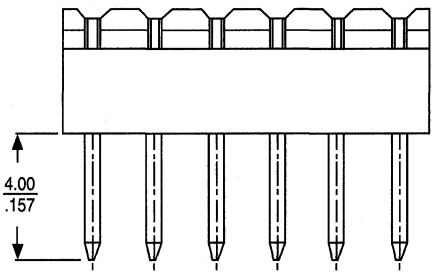
Circuits	15µin Select Gold	30µin Select Gold	Dim. A	Dim. B	Circuits	15µin Select Gold	30µin Select Gold	Dim. A	Dim. B
	Order No.	Order No.	mm	mm		Order No.	Order No.	mm	mm
4	87089-0416	87089-0417	2.00	3.90	28	87089-2816	87089-2817	26.00	27.90
6	87089-0616	87089-0617	4.00	5.90	30	87089-3016	87089-3017	28.00	29.90
8	87089-0816	87089-0817	6.00	7.90	32	87089-3216	87089-3217	30.00	31.90
10	87089-1016	87089-1017	8.00	9.90	34	87089-3416	87089-3417	32.00	33.90
12	87089-1216	87089-1217	10.00	11.90	36	87089-3616	87089-3617	34.00	35.90
14	87089-1416	87089-1417	12.00	13.90	38	87089-3816	87089-3817	36.00	37.90
16	87089-1616	87089-1617	14.00	15.90	40	87089-4016	87089-4017	38.00	39.90
18	87089-1816	87089-1817	16.00	17.90	42	87089-4216	87089-4217	40.00	41.90
20	87089-2016	87089-2017	18.00	19.90	44	87089-4416	87089-4417	42.00	43.90
22	87089-2216	87089-2217	20.00	21.90	46	87089-4616	87089-4617	44.00	45.90
24	87089-2416	87089-2417	22.00	23.90	48	87089-4816	87089-4817	46.00	47.90
26	87089-2616	87089-2617	24.00	25.90	50	87089-5016	87089-5017	48.00	49.90

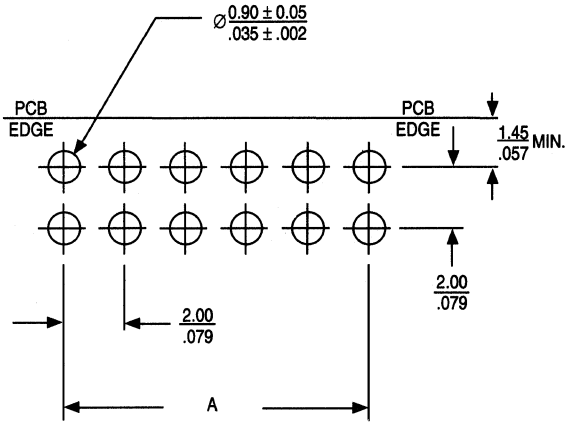
Milli-Grid™ 2.0mm .079" Center Connector System

87049 Series
Right Angle Header

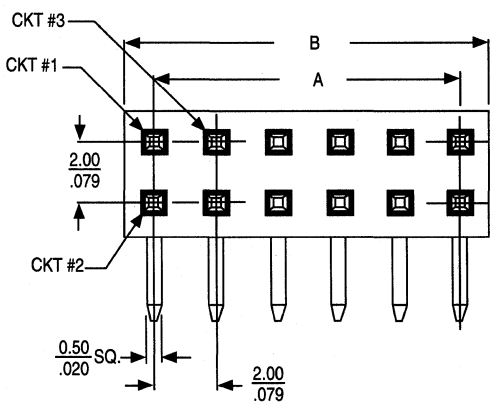


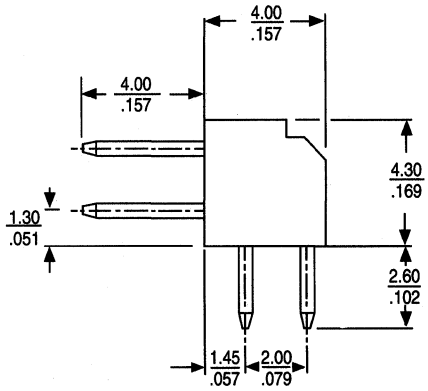
- 4-50 circuits
- Glass filled polyester, UL 94V-0, black
- 0.5mm square phosphor bronze pins
- End-to-end stackable
- For PCB thickness 1.60 ± 0.10mm
- Mates with Milli-Grid 2.0mm receptacles
- Tray packaging
- Options: - Void pin version
  - Kinked PC tail





PCB Layout





mm
inch

L

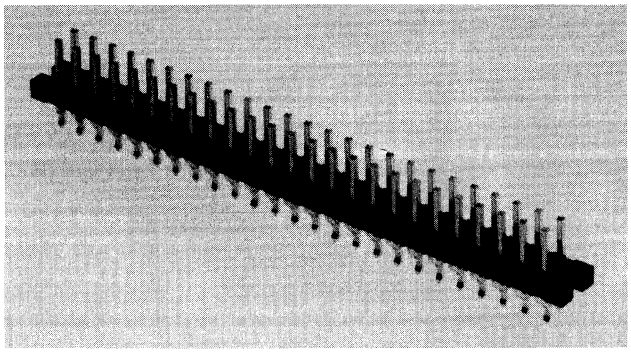
Ordering Information and Dimensions

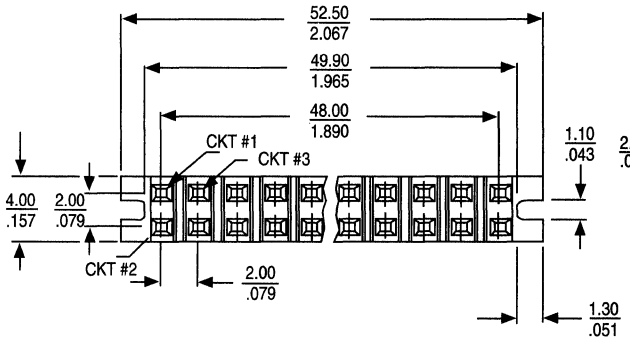
Circuits	15µin Select Gold	30µin Select Gold	Dim. A	Dim. B	Circuits	15µin Select Gold	30µin Select Gold	Dim. A	Dim. B
	Order No.	Order No.	mm	mm		Order No.	Order No.	mm	mm
4	87049-0416	87049-0417	2.00	4.00	28	87049-2816	87049-2817	26.00	28.00
6	87049-0616	87049-0617	4.00	6.00	30	87049-3016	87049-3017	28.00	30.00
8	87049-0816	87049-0817	6.00	8.00	32	87049-3216	87049-3217	30.00	32.00
10	87049-1016	87049-1017	8.00	10.00	34	87049-3416	87049-3417	32.00	34.00
12	87049-1216	87049-1217	10.00	12.00	36	87049-3616	87049-3617	34.00	36.00
14	87049-1416	87049-1417	12.00	14.00	38	87049-3816	87049-3817	36.00	38.00
16	87049-1616	87049-1617	14.00	16.00	40	87049-4016	87049-4017	38.00	40.00
18	87049-1816	87049-1817	16.00	18.00	42	87049-4216	87049-4217	40.00	42.00
20	87049-2016	87049-2017	18.00	20.00	44	87049-4416	87049-4417	42.00	44.00
22	87049-2216	87049-2217	20.00	22.00	46	87049-4616	87049-4617	44.00	46.00
24	87049-2416	87049-2417	22.00	24.00	48	87049-4816	87049-4817	46.00	48.00
26	87049-2616	87049-2617	24.00	26.00	50	87049-5016	87049-5017	48.00	50.00

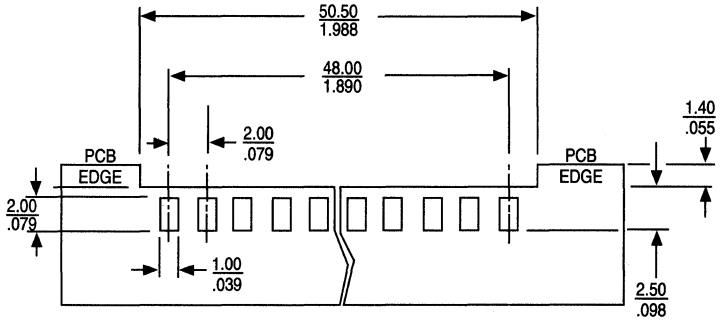
Milli-Grid™ 2.0mm .079" Center Connector System

87239 Series
Straddle-Mount Header

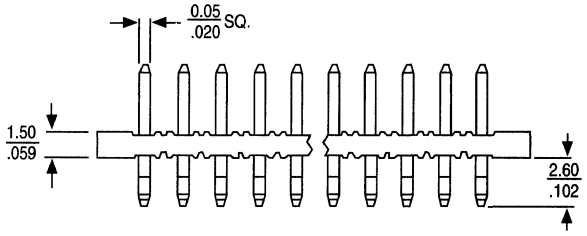
- 50 circuits
- High temp nylon, UL 94V-0, black
- 0.5mm square phosphor bronze pins
- For PCB thickness 0.89 ± 0.13mm or .035" ± .005"
- Mates with Milli-Grid 2.0mm receptacles
- Bulk packaging
- Option: - Product also available for PCB thickness 1.22 ± 0.13mm .045" ± .005"

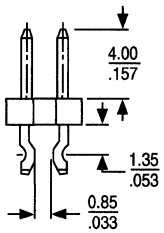






PCB Layout
Pattern Typical Both Sides





mm
inch

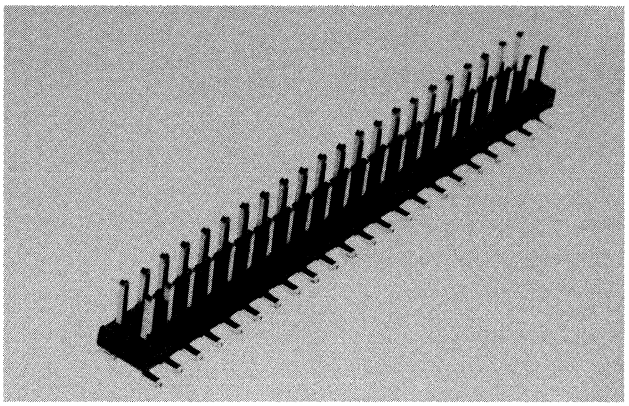
L

Ordering Information

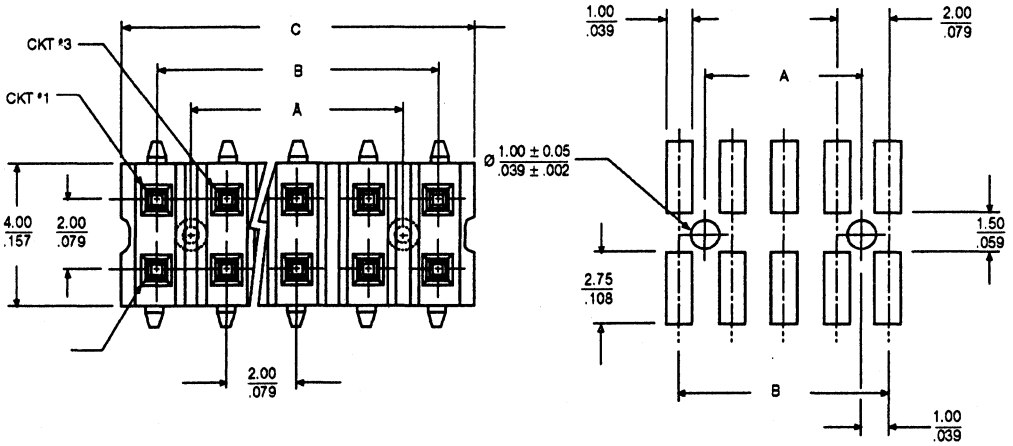
Circuits	Void Pin Location	15µin Select Gold Order No.	30µin Select Gold Order No.
50	None	87239-5001	87239-5011
50	9, 10, 28	87239-5002	87239-5012
50	5, 6, 25	87239-5003	87239-5013
50	5, 6, 26	87239-5004	87239-5014

Milli-Grid™ 2.0mm .079" Center Connector System

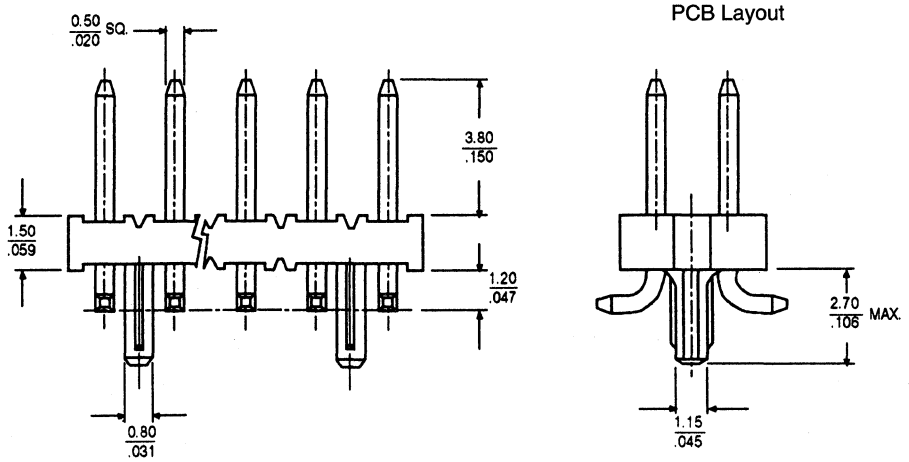
87267 Series
SMT Vertical Header



- 8-50 circuits
- High temp nylon, UL 94V-0, black
- 0.5mm square phosphor bronze pins
- Locating peg version standard
- For PCB thickness 1.60 ± 0.10mm (peg version)
- Mates with Milli-Grid 2.0mm receptacles
- Tube packaging
- Options: - Void pin version
  - Without peg version (4-50 ckts)



PCB Layout



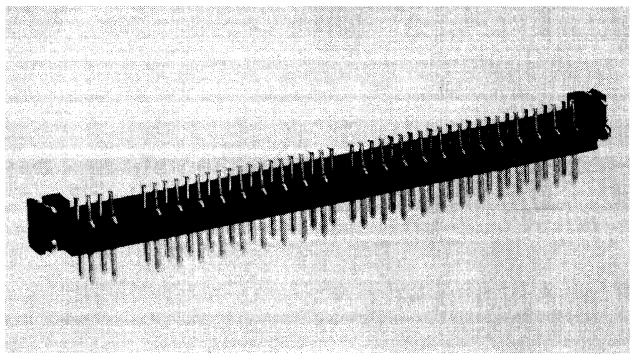
mm / inch

Ordering Information and Dimensions in mm

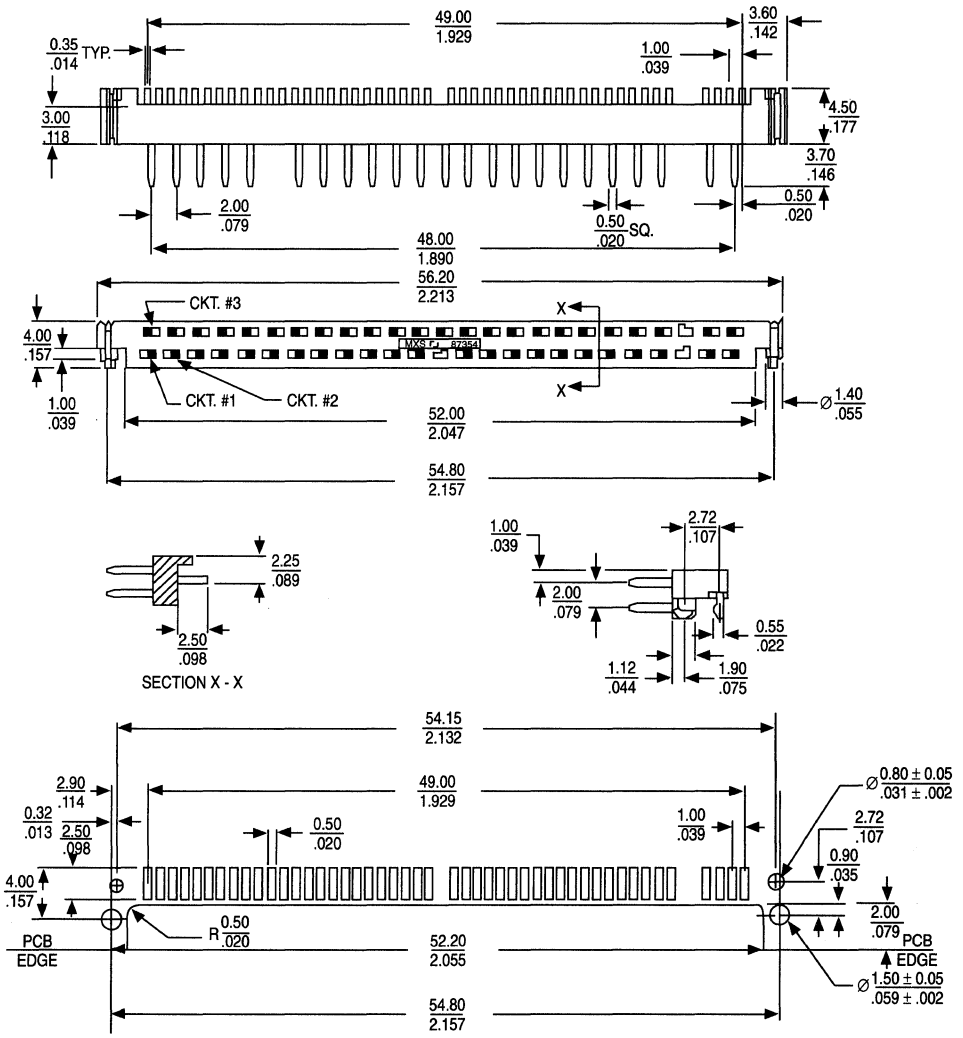
Circuits	15µin Select Gold	30µin Select Gold	Dim. A	Dim. B	Dim. C	Circuits	15µin Select Gold	30µin Select Gold	Dim. A	Dim. B	Dim. C
	Order No.	Order No.	mm	mm	mm		Order No.	Order No.	mm	mm	mm
8	87267-0850	87267-0851	4.00	6.00	7.90	30	87267-3050	87267-3051	26.00	28.00	29.90
10	87267-1050	87267-1051	6.00	8.00	9.90	32	87267-3250	87267-3251	28.00	30.00	31.90
12	87267-1250	87267-1251	8.00	10.00	11.90	34	87267-3450	87267-3451	30.00	32.00	33.90
14	87267-1450	87267-1451	10.00	12.00	13.90	36	87267-3650	87267-3651	32.00	34.00	35.90
16	87267-1650	87267-1651	12.00	14.00	15.90	38	87267-3850	87267-3851	34.00	36.00	37.90
18	87267-1850	87267-1851	14.00	16.00	17.90	40	87267-4050	87267-4051	36.00	38.00	39.90
20	87267-2050	87267-2051	16.00	18.00	19.90	42	87267-4250	87267-4251	38.00	40.00	41.90
22	87267-2250	87267-2251	18.00	20.00	21.90	44	87267-4450	87267-4451	40.00	42.00	43.90
24	87267-2450	87267-2451	20.00	22.00	23.90	46	87267-4650	87267-4651	42.00	44.00	45.90
26	87267-2650	87267-2651	22.00	24.00	25.90	48	87267-4850	87267-4851	44.00	46.00	47.90
28	87267-2850	87267-2851	24.00	26.00	27.90	50	87267-5050	87267-5051	46.00	48.00	49.90

Milli-Grid™ 2.0mm .079" Center Connector System

87354 Series
SMT Edge-Mount Header



- 50 circuits
- High temp nylon 4/6, UL 94V-0, black
- 0.5mm square brass pins
- For PCB thickness 0.80 ± 0.05mm .031 ± .002
- Void pin version standard (see Ordering Information)
- Reinforced phosphor bronze mounting clips
- Mates with Milli-Grid 2.0mm receptacles
- Tube packaging
- Options: - Fully loaded version
  - Other void pin locations



Recommended PCB Layout

mm / inch

Ordering Information

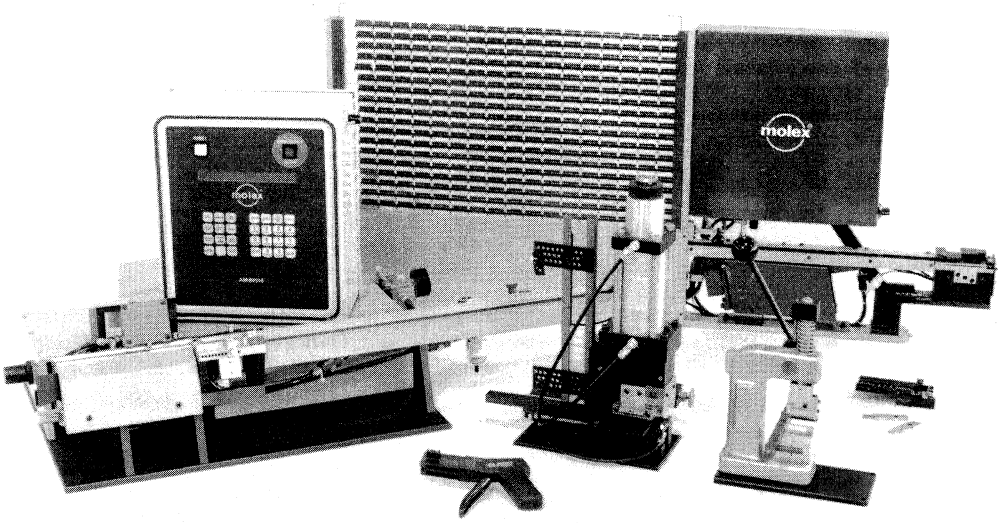
Circuits	Void Pin Location	30µin Select Gold Order No.
50	# 25, 45, 46	87354-5012
50	# 24, 41, 42	87354-5022
50	# 5, 6, 26	87354-5002
50	# 9, 10, 27	87354-5032

L

Notes

Application Tooling

Contents



Application Tooling Capabilities 2M

Insulation Displacement Technology 3M-9M

Crimp Technology 10M-33M

Wire Processing, Stripping and Termination Equipment 34M-36M

Robotics Technology 37M-43M

Pinsetting Equipment 44M

Product Specific Tooling for . . .

- C-Grid SL 45M-47M
- C-Grid III 48M-49M
- D-Subminiature 50M
- SEMCONN 51M-54M
- MX50/QF50/Other .050" Connectors 55M-61M
- Telephone Connectors 62M-66M
- 2.5 mm Spox 67M
- ACCESS.bus (trademark of Digital Equipment Corporation) 68M
- 70156 / 71156 / 4850 ..... 69M
- 7720S, 8160G, 90410, 78804/5/7 ..... 70M
- Cutting Tools for .100" and .156" Breakaway Headers 71M

M

Application Tooling Capabilities Chart

TECHNOLOGY	DESCRIPTION	CATEGORY	CAPACITY
Insulation Displacement (Discrete Wire)	Hand Terminator	Prototype Only	N/A
	Mini-Cam III (Bench Mounted)	Low-Medium Production Requirements	Up to 1200 Insertions/Hr.
	'Hawk' Series (Bench Mounted)	Low-Medium Production Requirements	Up to 1000 Insertions/Hr.
	'Eagle/Phoenix' Series Automatic Assembly Machine	High Volume Production Needs	Up to 72,000 Terminations/Hr.
Insulation Displacement (Cable)	Cable Notcher (Bench Mounted)	Low-Medium Production Needs	500 Notches/Hr. Avg. (Both ends)
	Cable Shear (Bench Mounted)	Low-Medium Production Needs	1000 'Cuts'/Hr. Avg.
	Arbor Press (Bench Mounted)	Low Volume Requirements	Up to 360 Cycles/Hr.
	Semi-Automatic Bench Terminator	Medium Volume Requirements	Up to 750 Cycles/Hr.
	'Eagle/Phoenix' Series Automatic Assembly Machine	High Volume Production Needs	Up to 72,000 Terminations/Hr.
Insulation Displacement (MX50)™ Product	Hand Terminator	Prototype Only	N/A
	Arbor Press (Bench Mounted)	Low Volume Production Needs	Up to 110 Assemblies/Hr.
	Semi-Automatic Terminator (Bench Mounted)	Medium Volume Requirements	Up to 750 Assemblies/Hr.
	'Osprey' Series Automatic Assembly Machine	Medium-High Volume	Up to 1800 Conn's/Hr.
Crimp	Hand Crimper	Prototype, Repair	N/A
	Mini-Mac Die	Compatible w/Competitive and Major O.E.M. Presses	Up to 3,000 Crimps/Hr.
	TM7 Universal Press (Bench Mounted)	Low-Medium Production Requirements	Up to 3,000 Crimps/Hr.
	TM42 Crimp Machine (Bench Mounted)	Low-Medium Production Requirements	Up to 3,000 Crimps/Hr.
	KM40S Automatic Terminating System	High Volume Production Requirements	Up to 7,500 Crimps/Hr. (Both ends of wire)
Robotic Delivery Systems	Manual Single Tray Unloading	Low-Medium Production Needs	12 Connectors/Min.
	Single Tube Unloading	Low-Medium Production Needs	30 Connectors/Min.
	Automatic Tube Magazine Unloading	Medium-High Production Requirements	30 Connectors/Min.
	Automatic Carton Matrix Unloading	Medium-High Production Requirements	30 Connectors/Min.
	Automatic Welded Film Pack	Medium-High Production Requirements	30 Connectors/Min.
	Automatic Vision Pack	Medium-High Production Requirements	30 Connectors/Min.

Insulation Displacement Technology

Introduction

Insulation Displacement Technology, IDT, is a wire termination technique in which an insulated wire is pressed into a terminal slot smaller than the conductor diameter, displacing the insulation, and forming an electrical contact between the terminal and conductor.

Insulation displacement offers three major advantages over other termination techniques.

- Electrical connectors are supplied to the customer with the terminals loaded into their final positions. This feature results in customer labor savings as additional operations are not required to complete the assembly.
- Hourly production rates are maximized through the simultaneous mass insertion of wires into multiple connectors.
- IDT allows for multiple connectors to be placed along a harness assembly (daisy chain) without the need to double terminate circuits.

Molex offers a full line of IDT terminating equipment ranging from simple handtools to fully automatic cable and discrete wire harness assembly machines. All tools are designed and manufactured using the latest technologies to ensure high quality in tool performance and in the product they produce.

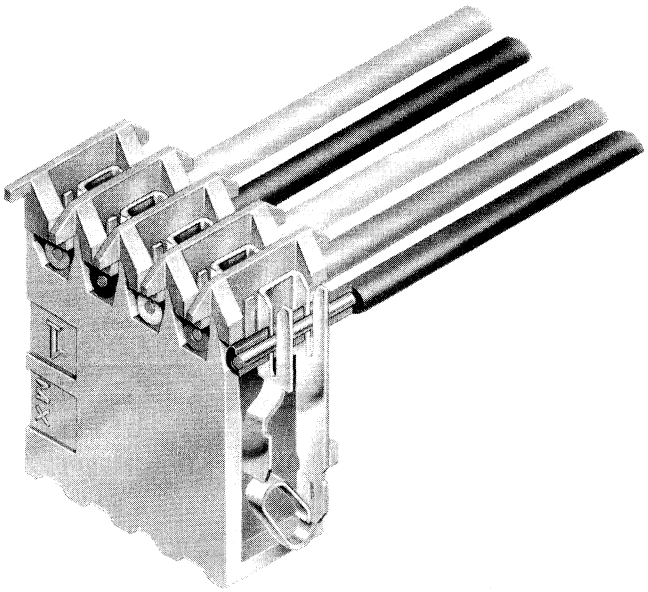
Low volume users can choose from a range of snap on modules that mount to a common pistol or bench mounted holder. These modules can be easily changed to accommodate various connector styles.

For higher production volumes, Molex offers a variety of semi-automatic bench tools to increase the end users produtivity. Production rates of up to 900 assemblies per hour are not uncommon. In addition to inserting wires into terminals, these machines can be upgraded to:

- automatically unload connectors from packaging such as extruded tubes, mylar film, adhesive tape, etc.
- perform secondary operations, for example, continuity testing, carrier strip breakoff, product marking, etc.

For large production requirements, Molex offers its customers fully automatic modular assembly machines. This modular concept allows the machine to be designed and built to meet exact customer requirements. This concept also enables the customer to add options at a future date as production needs change.

To ensure a machine's output meets the customer's requirements, all the machines built by Molex are statistically qualified.

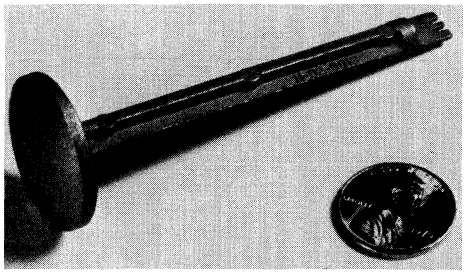


Cutaway view of insulation displacement connector with discrete wire terminations

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Insulation Displacement Termination Tooling

"T" Handle Discrete Wire Hand Tool

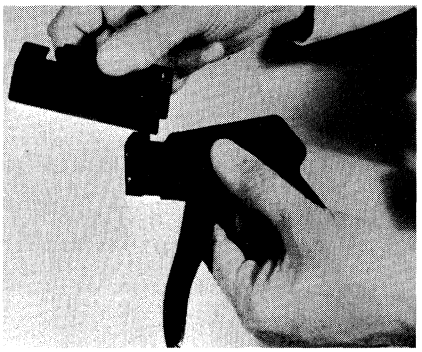


- For repair or prototype assembly of standard, harness, and edge connectors

Ordering Information

Eng. No.	Order No.	Description	Eng. No.	Order No.	Description
AM8600-14	11-02-0016	For .098" 2,5mm and .100" 2,54mm center connectors	AM8600-13	11-02-0015	For .156" 3,96mm and .197" 5,0mm and .200" 5,08mm center connectors

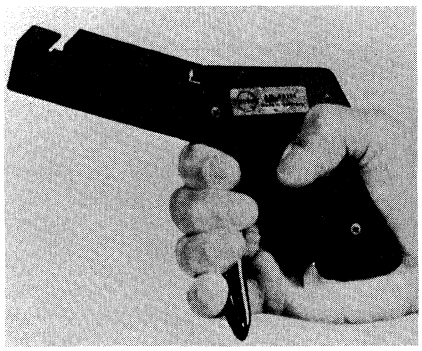
Discrete Wire Terminator Handgun for Standard Molex IDT™ Connectors



- For low volume, prototype, field application and repair
- Snap-on modular dies for .098" 2,5mm to .200" 5,08mm center standard connectors
- Automatic indexing to next position after insertion of discrete wire
- See MX50 termination tooling for .050" 1,27mm ribbon cable applications

Ordering Information Europe

Eng./Order No.	Description	For use with Molex Connectors
69008-0210	Pistol	
	Module For	
69008-0225	.098" 2,5mm and .100" 2,54mm center connectors	7720, 7795, 7745, 8951, 40798, 40775, 40922
69008-0240	.156" 3,96mm center connectors	7674, 7675, 8633, 40915, 40791, 41101, 40119, 40749
69008-0250	MX/QF50 connectors	5320, 5321, 40312
69008-0260	.100" 2,54mm connectors	8676
69008-0270	.197" 5,00mm and .200" 5,08mm connectors	7935, 7933, 7823, 6952
69008-0500	C-Grid III/HE 14	90153 / 54 / 75, 90225/26

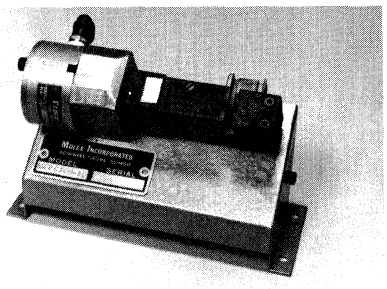


Ordering Information U.S.

Order No.	Description	Eng. No.	For use with Molex connectors
11-21-5194	Pistol	AM60114	
	Module For		
11-21-5197	.098" 2,5mm and .100" 2,54mm center connectors	AM60115	7720, 7795, 7745, 8951, 40798, 40775, 40922
11-21-8365	.100" 2,54mm center connectors	AM60519	40555
11-31-7597	.100" 2,54mm center connectors	AM60066	70400, 70475, 90187
11-21-5196	.156" 3,96mm center connectors	AM60116	7674, 7675, 8633, 40915, 40791, 41101, 40119, 40749
69008-0270	.197" 5,00mm and .200" 5,08mm connectors	AM60517	7935, 7933, 7823, 6952
11-31-8939	.098" 2,5mm	AM60087	42219, 42254

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Pneumatic Bench Terminator



- For low volume users
- Utilizes modules from handgun for Molex connectors
- For module AM60066 (11-31-7597), use pneumatic adaptor AM60522 (11-31-1570)
- Includes foot pedal and filter for air supply line
- Production rate – 750 terminations per hour

Ordering Information

Eng. No.	Order No.
AM60188-30	11-20-0739

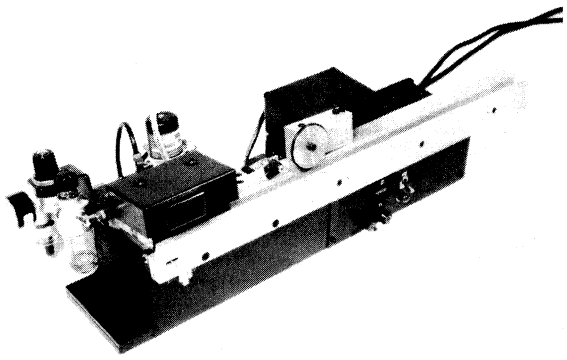
Insulation Displacement Single Wire Terminating Machine

Semi-Automatic Mini Cam III™

This unique machine assembles discrete wire to insulation displacement connector bodies. The use of an air powered cylinder assures uniform and proper insertion depth. Solenoid operated units are available upon request for applications where plant air is unavailable.

Connector bodies are loaded into the belt drive magazine. Proper wire is selected and placed into a lighted target area. A foot switch is depressed, the wire is inserted, and the connector is indexed to the next position.

- Operator controlled device
- Provides a fast, straight forward and low cost method of assembly
- Wire insertion is performed with the use of an air cylinder (standard) or electric solenoid (if air is unavailable)
- Accommodates connectors on .098" 2,50mm, .100" 2,54mm, .156" 3,96mm, .197" 5,00mm and .200" 5,08mm centers. Other versions available - contact factory
- 4-28 circuits with no adjustment
- Various wire lengths and colors
- Up to 1200 insertions per hour depending on operator skill and wire length
- Top loading
- Conveyor feed, belt type
- Release mechanism for stop pawl and feed finger
- Optional batch counter with certain connectors



Specifications

Weight: 40 lbs. 18,2 kg

Electrical: 110 or 220 Volts AC at 50 or 60 Hertz, 1∅ only
The machine draws approximately 5 amps

Height: 8" 203mm

Depth: 8" 203mm

Bench Space: 24" 609mm long

Pneumatic type requires 60-80 psi operating pressure

Air Operated Machines - Standard Version

Eng. No.	Order No.	Description	Housing Type	Eng. No.	Order No.	Description	Housing Type
AM-60183-P-C	11-20-0952	.100" 2,54mm centers	7745, 40775	AM-60157-P-C	11-20-0955	.200" 5,08mm centers	6952, 7933
AM-60180-P-C	11-20-0953	.156" 3,96mm centers	7674, 7991, 40590	AM-60185-P-C	11-20-0956	.100" 2,54mm centers	7822
AM-60179-P-C	11-20-0954	.100" 2,54mm centers	7720, 7795, 40555, 41716				

Electrically Operated Machines

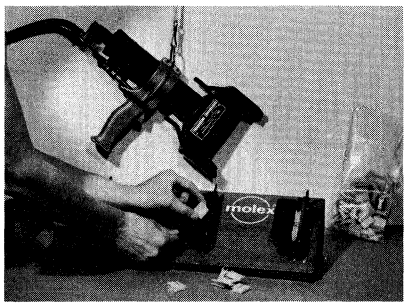
110V				220V			
Eng. No.	Order No.	Description	Housing Type	Eng. No.	Order No.	Description	Housing Type
AM-60144-1A	11-20-0580	.197" 5,0mm centers	8657	AM-60141-1	11-20-0535	.100" 2,54mm centers	3481
AM-60179-1A	11-20-0688	.100" 2,54mm centers	7720, 7795, 40555, 41716	AM-60179-1	11-20-0689	.100" 2,54mm centers	7720, 7795, 40555
AM-60183-1A	11-20-0686	.100" 2,54mm centers	7745, 40775	AM-60183-1	11-20-0696	.100" 2,54mm centers	7745, 40775
AM-60180-1A	11-20-0691	.156" 3,96mm centers	7674, 7991, 40590	AM-60180-1	11-20-0692	.156" 3,96mm centers	7674, 7991, 40590
AM-60157-1A	11-20-0694	.200" 5,08mm centers	6952, 7933	AM-60157-1	11-20-0695	.200" 5,08mm centers	6952, 7933
AM-60185-1A	11-20-0720	.100" 2,54mm centers	7822	AM-60185-1	11-20-0721	.100" 2,54mm centers	7822

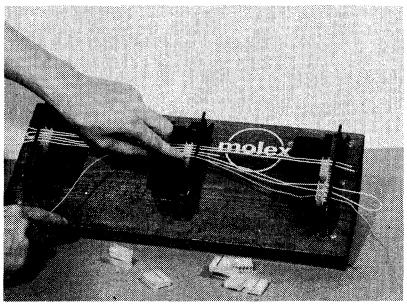
Insulation Displacement Harness Board Assembly Tool

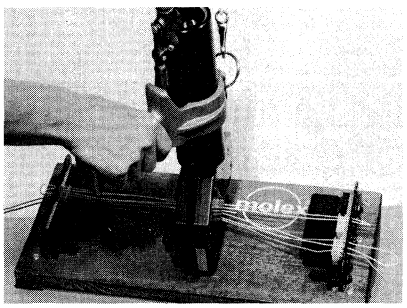
Not available in the U.S.

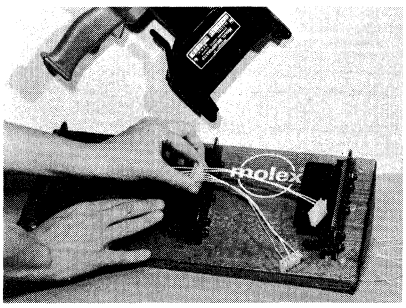
For Discrete Wire Termination

- ☐ Hand held, counter balanced, pneumatically powered
- ☐ Locates, trims and terminates wire
- ☐ Wire can be fed thru or cut during termination
- ☐ Connector size and location on board can be varied to your application.









Ordering Information

.098" 2,5mm centers

Eng. No.	Order No.	Description	Eng. No.	Order No.	Description
AM-8630-100	11-20-0346	Hand held air terminator - 28 circuit	AM-8630-102	11-20-0348	Harness board fixture no-cut/test - 28 circuit (7790)
AM-8630-101	11-20-0347	Harness board fixture cut-off/test - 28 circuit (7790)			

.100" 2,54mm centers

Eng. No.	Order No.	Description	Eng. No.	Order No.	Description
AM-8630-10	11-20-0295	Hand held terminator - 28 circuit	AM-8630-80	11-20-0307	Harness board fixture no/cut test - 28 circuit (7690)
AM-8630-30	11-20-0294	Harness board fixture cut/off test - 28 circuit (7690)			

.156" 3,96mm centers

Eng. No.	Order No.	Description	Eng. No.	Order No.	Description
AM-8630-1	11-20-0280	.156" 3,96mm 24 circuit terminator 7660/7241	AM-8630-5	11-20-0311	Harness board fixture cut/test - 24 circuit edgecard (7241)
AM-8630-3	11-20-0309	Harness board fixture cut-off/test - 24 circuit (7660)	AM-8630-52	11-20-0315	Harness board fixture no cut/test - 24 circuit, edgecard (7713)
AM-8630-2	11-20-0308	Harness board fixture no-cut/test - 24 circuit (7660)	AM-8630-53	11-20-0316	Harness board fixture with cut/test - 24 circuit, edgecard (7713)
AM-8630-4	11-20-0310	Harness board fixture no-cut/test - 24 circuit edgecard (7241)	AM-8630-60	11-20-0293	Hand held terminator for edge connectors - 24 circuit (7713)

Must be used with harness board connectors only

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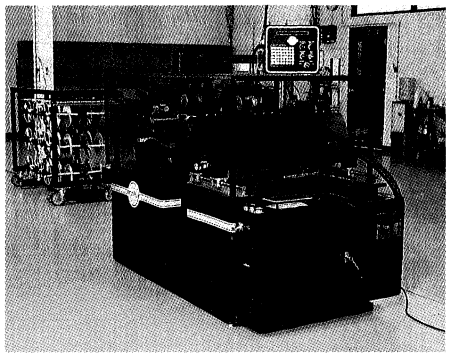
High Volume Insulation Displacement Tooling

AM 60000 Series
Harness Assembly Machines

- ☐ Fully automatic mass terminators for high volume applications *(minimum estimated annual usage 10 million terminations per year)*
- ☐ Developed from base modules for use with standard IDT and C-Grid SL connectors
- ☐ Two families of machines with advanced value-added options

Contact factory to order

Eagle Series

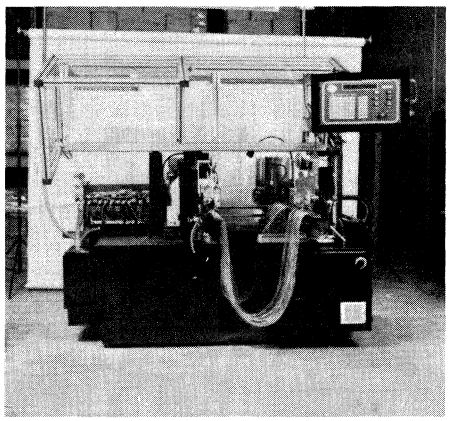


Standard Features include:

- ☐ Double or single ended harness capabilities without strip
- ☐ Single ended harness capabilities with strip
- ☐ Ribbon cable or discrete wire
- ☐ 32 circuit maximum; 2 circuit minimum
- ☐ User friendly solid state controller
- ☐ Wire lengths from 3" minimum to 24" maximum with all the wires the same length (Single End) wires lengths 6" - 24" (Double End)
- ☐ Cycle time: 6 to 11 seconds depending on wire length
- ☐ Stores up to 99 programs
- ☐ Modular design
- ☐ Self diagnostic
- ☐ Sturdy machine tool type construction
- ☐ Large variety of options

Contact factory to order

Phoenix Series



Standard Features include:

- ☐ Double or single ended harness capabilities without strip
- ☐ Single ended harness capabilities with strip
- ☐ Discrete wire or ribbon cable
- ☐ Variable or single extended wire length capability for discrete wire
- ☐ Single extended wire length capability for ribbon cable
- ☐ 32 circuit maximum; 2 circuit minimum
- ☐ User friendly solid state controller
- ☐ Wire lengths from 3" minimum to 120" maximum for single wire length & variable wire length (Single End) Wire lengths 6" - 24" (Double End)
- ☐ Cycle time: 6 to 11 seconds depending on wire lengths
- ☐ Modular design
- ☐ Self diagnostic
- ☐ Sturdy machine tool type construction
- ☐ Large variety of options

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Optional Features Eagle and Phoenix Series

- ☐ Continuity testing for single or double ended assemblies
- ☐ Housing load
  - Magazine style for bulk packaging
  - Single detuber for extruded tube packaging
  - Manual track for operator loading
  - Film dereeler for mylar reel packaging
  - Vibratory or centrifugal bowl feeding for continuous loading
  - Tape dereeler for continuous tape packaging
- ☐ Product marking:
  - Hot stamp method
  - Ink pad printing method
  - Automatic labeling
- ☐ Wire dereeler systems:
  - Up to 32 barrels capacity
  - Up to 32 (12") reels capacity
- ☐ Missing wire detection
- ☐ Wire splice detection
- ☐ Single or multiple notching or slitting for ribbon cable applications
- ☐ Strip and retain for discrete wire and cable
- ☐ Stores up to 99 programs
- ☐ Data storage for recall on 5 1/4" floppy disk media through a personal computer
- ☐ Variable wire length capability - 3" minimum to 24" maximum (Eagle Series) (Single End). Wire lengths 6" - 24" (Double End)

Ribbon Cable Tooling

Bench Mounted Prep Cable Notcher

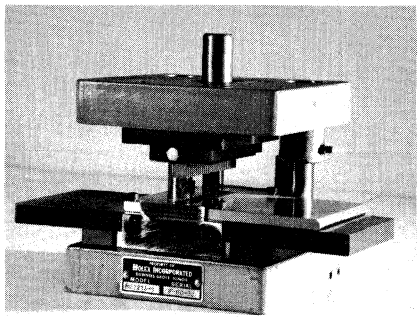
- Accommodates .156" 3,96mm center cable up to 24 circuits and .100" 2,54mm center cable up to 28 circuits
- Notches cable for feed thru or end termination of Molex ID connectors
- Five hundred notches per hour, both ends
- Must be used with Molex 3BF press

Specifications

Weight (with press) – 300 lbs.135 kg - Notcher only 45 lbs. 20.4 kg.

Electrical – 110/115 volts 60 Hertz / 220/240 volts 50 Hertz

Bench Space – Front 12" x 18" deep 30,5cm x 45,7cm



Ordering Information

Eng. No.	Order No.	Description	Eng. No.	Order No.	Description
AM-7213-1	•11-21-0728	.156" center cable notcher (18-24 Ga.)	AM-7234-75*	•11-21-4112	.100" center cable notcher (26-30 Ga.)
AM-7560*	•11-21-4114	.100" center cable notcher (22-24 Ga.)	AM-7234-50**	•11-20-0464	.100" center cable notcher (26-30 Ga.)
AM-7560-50**	•11-21-4120	.100" center cable notcher (22-24 Ga.)	AM-8160-100**	11-20-0439	2.5" center cable notcher (26-28 Ga.)
AM-60053†	11-20-0944	.100" center cable notcher (24-26-28 Ga.)	AM-63225	11-20-1258	2.5" center cable notcher (26-28 Ga.)

* Full notch
** Web notch
† Full notch for C-Grid SL application only
•U.S. Standard Product, available through Molex franchised distributors

NOTE: Standard pricing does not include cost of press

Bench-Style Cable Shear

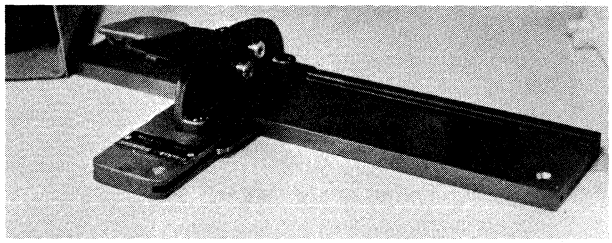
- Accommodates .050" 1,27mm, .098" 2,5mm, .100" 2,54mm or .156" 3,96mm cable
- Table mounted hand tool for fast, accurate and low cost cable cutting
- Cable stop for cut length control
- Maximum cable width $3^{7}/_{8}$" 98,42mm
- Also for flat flexible cable

Specifications

Weight – 4¾ lbs. 2,13 kg

Table Space – 20" x 10" 51cm x 25,4cm

Height – 5" 12,7cm



Eng. No.	Order No.
AM7213-60	11-20-0785

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Arbor Press

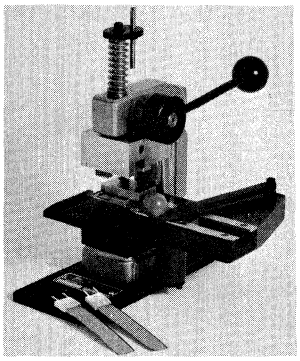
- Accommodates .098" 2,5mm, .100" 2,54mm and .156" 3,96mm center cable - 2 to 16 circuits
- Feed thru or feed to assembly
- For medium volume users

Specifications

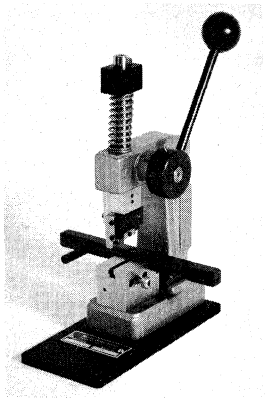
Weight – 18 lbs 8,1 kg

Bench Space – 6" x 12" 152,2cm x 30,5cm

Height – 10" 25,4cm



.098" 2,5mm Center Arbor Terminator



.100" 2,54mm and .156" 3,96mm Center Arbor Terminator

Eng. No.	Order No.	Description	For Connectors
AM-7275-100	•11-20-0179	.100" center arbor terminator	7720, 40555
AM-7223-126	•11-20-0314	.156" center arbor terminator	7674, 7675
AM-8160-1	11-20-0436	.098" center arbor terminator for 8160 housing - up to 20 circuits - feed to only	8160
AM-7223-140	11-20-0815	.156" center arbor terminator	7660

• U.S. Standard Product, available through Molex franchised distributors.

Ribbon Cable Tooling

Semi Automatic Terminator

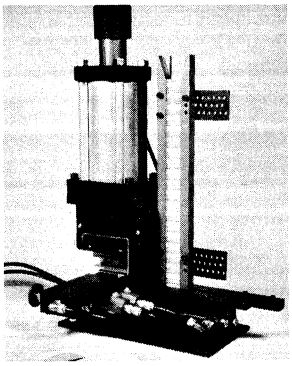
- For .156" 3,96mm center cable - 2 to 24 circuits and .100" 2,54mm center cable - 3-28 circuits
- Terminates pre-notched cable to pre-assembled connectors
- Bench mounted and operator controlled
- Feed thru capability
- 550 assemblies per hour

Specifications

Weight – 30 lbs. 13,5 kg

Pneumatic – 80-100 psig 5cfm 5,4-6,8 ATM @ 0,14cfm

Bench Space Height – 17"



Ordering Information

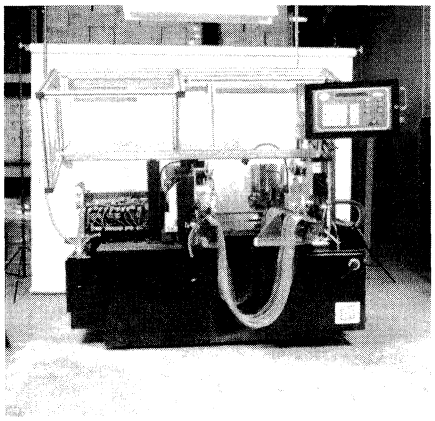
Eng. No.	Order No.	Description	Eng. No.	Order No.	Description
AM8640	• 11-20-0412	.100" center cable terminator (7720 Connector)	AM8642	• 11-20-0418	.156" center cable terminator
AM8640B	11-20-0771	.100" center cable terminator for 40555 and 7720 connectors with backwall	AM8643	11-20-0435	7795 connectors
			AM8644	11-20-0498	8160 connectors
AM8640D	11-20-1004	.100" center cable terminator for 7720S connector	AM8646	Contact factory	.156" center edge card
AM8641	• 11-20-0411	.100" center cable terminator (edge card) 7822			

• U.S. Standard Product, available through Molex franchised distributors.

High Volume Ribbon Cable Tooling

AM 60000 Series

Harness Assembly Machine Phoenix Series



- Fully automatic mass terminators for high volume applications
- Developed from base modules for use with standard IDT and C-Grid SL connectors
- Double or single ended harness capabilities without strip
- Single ended harness capabilities with strip
- Discrete wire or ribbon cable
- Variable or single extended wire length capability for discrete wire
- Single extended wire length capability for ribbon cable
- 32 circuit maximum; 2 circuit minimum
- User friendly solid state controller
- Wire lengths from 3" minimum to 120" maximum for single wire length & variable wire length
- Cycle time: 5.5 to 10.5 seconds depending on wire lengths
- Modular design
- Self diagnostic
- Sturdy machine tool type construction
- Large variety of options

Contact Factory for Ordering Information

M

Crimp Technology

Introduction

Crimping is the metallurgical compression of two materials to create a common electrical path of low resistance and high current carrying capabilities.

The insulation grip on the terminal provides wire support and allows terminals to withstand shock and vibration. Crimp terminations can be achieved at a high production rate with the assurance of quality.

Molex offers a full range of application tooling and a full range of manual tools for crimp products.

Low volume users can choose the basic hand tool which uses loose terminals providing an excellent reliable crimp.

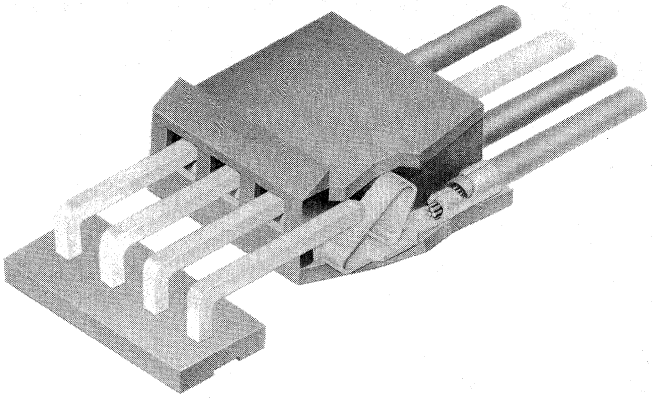
Medium volume users can select one of the Molex bench terminator which offers quick change-over for various die sets with easily adjustable crimp feed and crimp height settings.

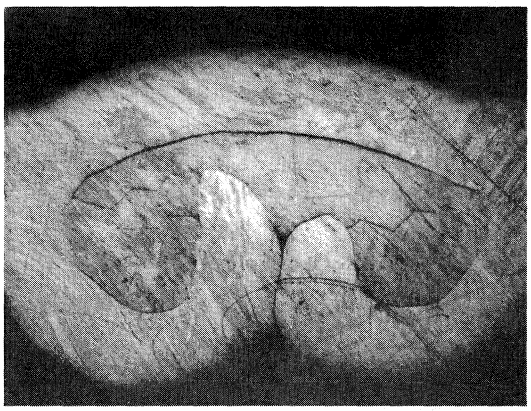
Molex also offers a Universal Crimping Applicator which is designed to operate with numerous commercially available industry standard bench and automatic presses. This unit is versatile, reliable, very easy to install and provides a termination that meets the most stringent crimp requirements.

The universal press, coupled with this applicator, becomes a piece of equipment that can be set up to pre-feed terminals (for bench crimping) or post feed terminals (for automatic crimping).

The stripper crimper is offered for prepared harness forms and multi-conductor cables which require an insulation strip prior to the crimp operation.

High volume users can choose our fully automatic wire processing system designed for cutting, stripping and crimping one or both conductor ends using any of the Molex terminals and all makes of wire 10-26 AWG .14mm^2-6mm^2 stranded, 16-26 AWG .14mm^2-1.5mm^2 solid. The processing system can be set up with any Molex press and terminator on one or both ends and can produce up to 3700 wires per hour.



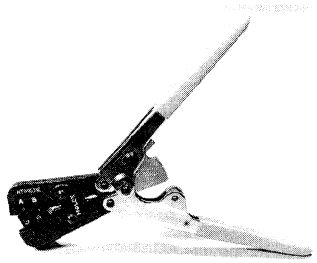


M

Crimp Tooling

Hand Crimpers

- Ratchet hand crimpers will not open until crimp action is completed
- Adjustable eccentric to allow for crimp pressure adjustment
- Special application tools available on request
- Wire stop and terminal locator option
- Hand tools available to accommodate AWG 12 to 30



Hand Crimpers Cross Reference

HAND CRIMP TOOL CROSS REFERENCE - When ordering Hand Crimp Tools, include terminal number to be crimped, wire size, insulation and send a 3 foot or 1 meter wire sample to Molex with the order.

Terminal	Stripping Length in. mm	Wire Range AWG (XX)² mm	Insul. Dia. Max. in. mm	Hand Tool Eng. No.	Hand Tool Order No.	Extractor Eng. No.	Extractor Order No.	Insertion Eng. No.	Insertion Order No.
1189-1190	.156/.218 3,96/5,53	14-20 (2,00/0,50mm)²	.140 3,55	HTR-1031-E	•11-01-0084	HT-2038	•11-03-0006	HT-1353	•11-02-0003
1220-1219	.171/.203 4,34/5,15	12-14 (3,25/2,00mm)²	.165 4,19	HTR-4067	11-01-0040	HT-4112	11-03-0021	N/A	N/A
1380-1381	.156/.218 3,96/5,53	18-26 (0,80/0,12mm)²	.120 3,04	HTR-1031-E	•11-01-0084	HT-2038	•11-03-0006	HT-1353	•11-02-0003
1433-1434	.156/.218 3,96/5,53	22-30 (0,35/0,05mm)²	.060 1,52	HTR-2262	•11-01-0006	HT-2038	•11-03-0006	HT-1353	•11-02-0003
1450-1451	.156/.218 3,96/5,53	14-20 (2,00/0,50mm)²	.140 3,55	HTR-1031-E	•11-01-0084	HT-2038	•11-03-0006	HT-1353	•11-02-0003
1457-2	.156/.218 3,96/5,53	14-16 (2,00/1,30mm)²	.140 3,55	HTR-1031-E	•11-01-0084	N/A	N/A	HT-1461	11-02-0007
1457-1	.156/.218 3,96/5,53	18-22 (0,80/0,35mm)²	.102 2,59	HTR-1031-E	•11-01-0084	N/A	N/A	HT-1461	11-02-0007
1508-1	.156/.218 3,96/5,53	14-20 (2,00/0,50mm)²	.140 3,55	HTR-2450A	11-01-0101	HTA-2174	•11-03-0016	N/A	N/A
1560-1561	.125/.156 3,17/3,96	18-24 (0,80/0,20mm)²	.110 2,79	HTR-1719-C	•11-01-0008	HT-2285	•11-03-0002	HT-1807	•11-02-0001
1786-1787	.125/.156 3,17/3,96	18-24 (0,80/0,20mm)²	.110 2,79	HTR-1719-C	•11-01-0008	HT-2285	•11-03-0002	HT-1807	•11-02-0001
1793	.125/.156 3,17/3,96	18-24 (0,80/0,20mm)²	.110 2,79	HTR-1719-C	•11-01-0008	HT-2285	•11-03-0002	HT-1807	•11-02-0001
1797	.125/.156 3,17/3,96	18-24 (0,80/0,20mm)²	.110 2,79	HTR-6115	11-01-0058	HT-1884	•11-03-0003		
1799	.125/.187 3,17/4,74	18-24 (0,80/0,20mm)²	.125 3,05	HTR-1719-C	•11-01-0008	HT-1884	•11-03-0003		
1854-1855	.125/.156 3,17/3,96	24-30 (0,20/0,05mm)²	.070 1,77	HTR-2262-A	•11-01-0037	HT-2285	•11-03-0002	HT-1807	•11-02-0001
1881-2	.156/.218 3,96/5,53	16-24 (1,30/0,20mm)²	.135 3,42	HTR-1031-E	•11-01-0084	N/A	N/A	N/A	N/A
1881-3	.156/.218 3,96/5,53	24-30 (0,20/0,05mm)²	.060 1,52	HTR-2262	•11-01-0006	N/A	N/A	N/A	N/A
1900-1901	.156/.218 3,96/5,53	10-14 (5,25/2,00mm)²	.180 4,57	HTR-4067	11-01-0040	HT-2066-A	11-03-0008	N/A	N/A
1917	.125/.156 3,17/3,96	18-24 (0,80/0,20mm)²	.110 2,79	HTR-1719-C	•11-01-0008	HT-1884	•11-03-0003		
1929	.125/.156 3,17/3,96	18-22 (0,80/0,35mm)²	.110 2,79	HTR-4059-A	11-01-0088	N/A	N/A		
1943	.125/.187 3,17/4,74	18-24 (0,80/0,20mm)²	.110 2,79	HTR-1719-C	•11-01-0008	HT-2215	•11-03-0010		
1973	.156/.218 3,96/5,53	16-22 (1,30/0,35mm)²	.120 3,04	HTR-1031-E	•11-01-0084	HT-2634	11-03-0017	HT-1353	•11-02-0003
2012	.125/.156 3,17/3,96	18-24 (0,80/0,20mm)²	.110 2,79	HTR-1719-C	•11-01-0008	HT-1884	•11-03-0003		
2014	.125/.156 3,17/3,96	24-30 (0,20/0,05mm)²	.070 1,77	HTR-2262	•11-01-0006	HT-1884	•11-03-0003		
2046-2047	.156/.218 3,96/5,53	16-20 (1,30/0,50mm)²	.120 3,04	HTR-1031-E	•11-01-0084	HT-2066-A	11-03-0008		
2107	.125/.156 3,17/3,96	24-30 (0,20/0,05mm)²	.070 1,77	HTR-1719-B2	11-01-0108	N/A	N/A		

• U.S. Standard Product, available through Molex franchised distributors.

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Hand Crimpers Cross Reference

HAND CRIMP TOOL CROSS REFERENCE - When ordering Hand Crimp Tools, include terminal number to be crimped, wire size, insulation and send a 3 foot or 1 meter wire sample to Molex with the order.

Terminal	Stripping Length in. mm	Wire Range AWG (XX)² mm	Insul. Dia. Max. in. mm	Hand Tool Eng. No.	Hand Tool Order No.	Extractor Eng. No.	Extractor Order No.	Insertion Eng. No.	Insertion Order No.
2123	.125/.156 3,17/3,96	18-24 (0,80/0,20mm)²	.110 2,79	HTR-4059-A	11-01-0088	N/A	N/A		
2125	.125/.156 3,17/3,96	24-30 (0,20/0,05mm)²	.070 1,77	HTR-4059-A	11-01-0088	N/A	N/A		
2151-2152	.156/.218 3,96/5,53	18-26 (0,80/0,12mm)²	.120 3,04	HTR-1031-E	•11-01-0084	HT-2038	•11-03-0006	HT-1353	•11-02-0003
2176	1.40/1.87 3,55/4,74	14-22 (2,00/0,35mm)²	.140 3,55	HTR-2450A	11-01-0101	HTA-2174	•11-03-0016		
2189-2190	.125/.156 3,17/3,96	24-30 (0,20/0,05mm)²	.070 1,77	HTR-2262-A	•11-01-0137	HT-2285	•11-03-0002	HT-1807	•11-02-0001
2192	.156/.218 3,96/5,53	24-30 (0,20/0,05mm)²	.060 1,52	HTR-2262	•11-01-0006	HT-2038	•11-03-0006	HT-1353	•11-02-0003
2236-2237	.156/.218 3,96/5,53	20-22 (0,50/0,35mm)²	.060 1,52	HTR-1031-E	•11-01-0084	HT-2066-A	11-03-0008	HT-1353	•11-02-0003
2269	.156/.218 3,96/5,53	14-20 (0,50mm)²	.140 3,55	HTR-1031-E	•11-01-0084	HT-2038	•11-03-0006	HT-1353	•11-02-0003
2273	.156/.218 3,96/5,53	18-22 (0,80/0,35mm)²	.120 3,04	HTR-1031-E	•11-01-0084	HT-2038	•11-03-0006	HT-1353	•11-02-0003
2282-2283	.156/.218 3,96/5,53	14-18 (2,00/0,80mm)²	.140 3,55	HTR-1031-E	•11-01-0084	HT-2066-A	11-03-0008	HT-1353	•11-02-0003
2328	.140/.187 3,55/4,74	14-22 (2,00/0,35mm)²	.110 2,79	HTR-2450A	11-01-0101	HTA-2174	•11-03-0016		
2477-2478	.100/.125 2,54/3,17	18-24 (0,80/0,20mm)²	.110 2,79	HTR-2445-A	•11-01-0026	HTA-2174	•11-03-0016		
2482	.187/.218 4,74/5,53	12-14 (3,25/2,00mm)²	.165 4,19			HTA-6277	11-03-0028	N/A	N/A
2576	.140/.187 3,55/4,74	14-22 (2,00/0,35mm)²	.140 3,55	HTR-2450A	11-01-0101	HTA-2174	•11-03-0016	N/A	N/A
2578	.100/.125 2,54/3,17	22-26 (0,35/0,12mm)²	.060 1,52	HTR-2445-A	11-01-0026	HTA-2174	•11-03-0016		
2679	.125/.156 3,17/3,96	18-24 (0,80/0,20mm)²	.110 2,79	HTR-1719-C	•11-01-0008	HT-2285	•11-03-0002	HT-1807	•11-02-0001
2697-1	.156/.218 3,96/5,53	12-20 (3,25/0,50mm)²	.188 4,77	HTR-1758	11-01-0011	HT-934	11-03-0001	N/A	N/A
2697-2	.156/.218 3,96/5,53	12-20 (3,25/0,20mm)²	.230 5,84	HTR-2266	•11-01-1026	HT-934	11-03-0001	N/A	N/A
2698	.156/.218 3,96/5,53	14-22 (2,00/0,35mm)²	1.40 3,55	HTR-2450A	11-01-0101	HTA-2174	•11-03-0016	N/A	N/A
2699	.156/.218 3,96/5,53	12-20 (3,25/0,20mm)²	1.88 4,77	HTR-1758	11-01-0011	HT-934	11-03-0001	N/A	N/A
2717	.125/.156 3,17/3,96	24-30 (0,20/0,05mm)²	.070 1,77	HTR-2262-A	•11-01-0037	HT-2285	•11-03-0002	HT-1807	•11-02-0001
2759	.100/.125 2,54/3,17	24-30 (0,20/0,05mm)²	.062 1,57	HTR-2262-20A	•11-01-0037	HT-2759	•11-02-0022	HT-2813	11-02-0004
2776	.156/.218 3,96/5,53	14-20 (2,00/0,50mm)²	.140 3,55	HTR-2090-A	11-01-0019	HTA-2174	•11-03-0016	N/A	N/A
2799	.156/.218 3,96/5,53	22-28 (0,35/0,07mm)²	.070 1,77	HTR-2262	•11-01-0006	HTA-2174	•11-03-0016		
2855	.125/.156 3,17/3,96	18-24 (0,80/0,20mm)²	.110 2,79	HTR-1719-C	•11-01-0008	HT-2285	•11-03-0002	HT-1807	•11-02-0001
2870-2871	.156/.218 3,96/5,53	22-24 (0,35/0,20mm)²	.070 1,77	HTR-7176	11-01-0097	HT-2038	•11-03-0006	HT-1353	•11-02-0003
2878	.125/.156 3,17/3,96	18-24 (0,80/0,20mm)²	.110 2,79	HTR-2445-A	11-01-0026	HTA-2174	•11-06-0016		
2951	.125/.156 3,17/3,96	24-30 (0,20/0,05mm)²	.070 1,77	HTR-2262-A	•11-01-0037				
3100	.125/.156 3,17/3,96	24-30 (0,20/0,05mm)²	.070 1,77	HTR-2262	•11-01-0006	HT-1884	•11-03-0003		
4018	.100/.125 2,54/3,17	18-24 (0,80/0,20mm)²	.110 2,79	HTR-2445-A	11-01-0026	HTA-2174	•11-03-0016		
4259	.100/.125 2,54/3,17	22-30 (0,35/0,05mm)²	.070 1,77						
4268	.156/.218 3,96/5,53	14-20 (0,50mm)²	.140 3,55	HTR-1031-E	•11-01-0084	HT-2038	•11-03-0006	HT-1353	•11-02-0003
4272	.156/.218 3,96/5,53	18-22 (0,80/0,35mm)²	.120 3,04	HTR-1031-E	•11-01-0084	HT-2038	•11-03-0006	HT-1353	•11-02-0003
4292	.156/.218 3,96/5,53	22-30 (0,35/0,05mm)²	.060 1,52	HTR-2262	•11-01-0006	HT-2038	•11-03-0006	HT-1353	•11-02-0003

• U.S. Standard Product, available through Molex franchised distributors.

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Hand Crimpers Cross Reference

HAND CRIMP TOOL CROSS REFERENCE - When ordering Hand Crimp Tools, include terminal number to be crimped, wire size, insulation and send a 3 foot or 1 meter wire sample to Molex with the order.

Terminal	Stripping Length in. mm	Wire Range AWG (XX)² mm	Insul. Dia. Max. in. mm	Hand Tool Eng. No.	Hand Tool Order No.	Extractor Eng. No.	Extractor Order No.	Insertion Eng. No.	Insertion Order No.
4295	.125/.156 3,17/3,96	18-24 (0,80/0,20mm)²	.110 2,79	HTR-1719-C	•11-01-0008	HT-1884	•11-03-0003		
4296	.156/.218 3,96/5,53	16-22 (1,30/0,35mm)²	.120 3,04	HTR-1031-E	•11-01-0084	HT-4981	11-03-0025	N/A	N/A
4296-1	.156/.218 3,96/5,53	16-22 (1,30/0,35mm)²	.120 3,04	HTR-1031-E	•11-01-0084	HT-4981	11-03-0025	N/A	N/A
4366	.125/.156 3,17/3,96	18-24 (0,80/0,20mm)²	.110 2,79	HTR-6115	11-01-0058	HT-1884	•11-03-0003	N/A	N/A
4428-1	.125/.156 3,17/3,96	18-24 (0,80.0,20mm)²	.110 2,79	HTR-2445-A	11-01-0026				
4428-3	.125/.156 3,17/3,96	22-26 (0,35/0,12mm)²	.062 1,57	HTR-2445-A	11-02-0026				
4499	.125/.187 3,17/4,74	18-24 (0,80/0,20mm)²	.125 3,05	HTR-1719-C	•11-01-0008	HT-1884	•11-03-0003		
4529	.125/.156 3,17/3,96	18-24 (0,80/0,20mm)²	.110 2,79	HTR-1719-C	•11-01-0008	HT-2285	•11-03-0002	HT-1807	•11-02-0001
4548	.100/.125 2,54/3,17	24-30 (0,20/0,05mm)²	.062 1,57	HTR-2262-A	•11-01-0037	HT-2759	11-03-0022	N/A	N/A
4549	.156/.218 3,96/5,53	14-20 (2,00/0,50mm)²	.140 3,55	HTR-1031-E	•11-01-0084	HT-2038	•11-03-0006	HT-1353	•11-02-0003
4550	.156/.218 3,96/5,53	14-20 (2,00/0,50mm)²	.140 3,55	HTR-1031-E	•11-01-0084	HT-2038	•11-03-0006	HT-1353	•11-02-0003
4559	.125/.156 3,17/3,96	24-30 (0,20/0,05mm)²	.070 1,77	HTR-2262-A	•11-01-0037	HT-2285	•11-03-0002	HT-1807	•11-02-0001
4563	.156/.218 3,96/5,53	18-26 (0,80/0,12mm)²	.120 3,04	HTR-1031-E	•11-01-0084	HT-2038	•11-03-0006	HT-1353	•11-02-0003
4573	.125/.156 3,17/3,96	24-30 (0,20/0,05mm)²	.070 1,77	HTR-6115	11-01-0058	HT-1884	•11-03-0003	N/A	N/A
4578	.100/.125 2,54/3,17	18-24 (0,80/0,20mm)²	.110 2,79	HTR-2445-A	11-01-0026	HTA-2174	•11-03-0016		
4583	.125/.156 3,17/3,96	22-30 (0,35/0,05mm)²	.060 1,52	HTR-2445-A	11-01-0026	HTA-2174	•11-03-0016		
4706	.234/.250 5,94/6,35	18-22 Std. Cr. (0,80/0,35mm)²	.118 2,99	HTR-4971-A	11-01-0065	N/A	N/A	N/A	N/A
4706-1	.234/.250 5,94/6,35	18 Std. Cr. (0,80mm)²	.118 2,99	HTR-4971-B	11-01-0066	N/A	N/A	N/A	N/A
4706-2	.234/.250 5,94/6,35	18-22 Std. Cr. (0,80/0,35mm)²	.118 2,99			N/A	N/A	N/A	N/A
4706-3	.234/.250 5,94/6,35	18-22 Std. Cr. (0,80/0,35mm)²	.110 2,79	HTR-4971-D	11-01-0068	N/A	N/A	N/A	N/A
4809	.100/.125 2,54/3,17	22-30 (0,35/0,05mm)²	.062 1,57	HTR-2262-A	•11-01-0037	HT-2759	11-03-0022	N/A	N/A
4811	.234/.250 5,94/6,35	22-24 (0,35/0,20mm)²	.100 2,54			N/A	N/A	N/A	N/A
4811-1	.234/.250 5,94/6,35	22-26 (0,35/0,12mm)²	.060 1,52	HTR-4971-E	11-01-0085	N/A	N/A	N/A	N/A
4811A-3	.234/.250 5,94/6,35	22-24 (0,35/0,20mm)²	.100 2,54						
4811A-4	.234/.250 5,94/6,35	22-26 (0,35/0,12mm)²	.060 1,52						
4838	.100/.125 2,54/3,17	20-22 (0,50/0,35mm)²	.095 2,41	HTR-2445-A	11-01-0026	HTA-2174	•11-03-0016	N/A	N/A
5033	.125/.156 3,17/3,96	24-30 (0,20/0,05mm)²	.070 1,77			N/A	N/A	N/A	N/A
5139	.100/.125 2,54/3,17	24-30 (0,20/0,05mm)²	.062 1,57	HTR-2262-A	•11-01-0037	HT-2759	11-03-0022	HT-2813	11-02-0004
5167	.100/.125 2,54/3,17	18-24 (0,80/0,20mm)²	.110 2,79	HTR-2445-A	11-01-0026	HTA-2174	•11-03-0016		
5556/5558		18-24 (0,80/0,20mm)²	.051-.118 1,3-3	HTR-60622	11-01-0122	HT-60630A	11-03-0038		
		22-28 (0,35/0,04mm)²	.035-.071 0,9-1,8	HTR-60639	11-01-0125	HT-60630A	11-03-0038		
		16 (1,30mm)	.071-.122 1,8-3,1	HTR-60670	11-01-0145	HT-60630A	11-03-0038		
6043	.125/.156 3,17/3,96	24-30 (0,20/0,05mm)²	.070 1,77	HTR-2262	•11-01-0006	HT-1884	•11-03-0003		
6093-1	.100/.125 0,35	22 (0,35/0,20mm)²	.095 2,41					N/A	N/A

• U.S. Standard Product, available through Molex franchised distributors.

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Hand Crimpers Cross Reference

HAND CRIMP TOOL CROSS REFERENCE - When ordering Hand Crimp Tools, include terminal number to be crimped, wire size, insulation and send a 3 foot or 1 meter wire sample to Molex with the order.

Terminal	Stripping Length in. mm	Wire Range AWG (XX)² mm	Insul. Dia. Max. in. mm	Hand Tool Eng. No.	Hand Tool Order No.	Extractor Eng. No.	Extractor Order No.	Insertion Eng. No.	Insertion Order No.
6271	.156/.218 3,96/5,53	18-22 (0,80/0,35mm)²	.120 3,04	HTR-1031-E	•11-01-0084	HT-2038	•11-03-0006	HT-1353	•11-02-0003
6308	.156/.218 3,96/5,53	22-30 (0,35/0,05mm)²	.060 1,52	HTR-2262	•11-01-0006	HT-2038	•11-03-0006	HT-1353	•11-02-0003
6310	.156/.218 3,96/5,53	14-20 (2,00/0,50mm)²	.140 3,55	HTR-1031-E	•11-01-0084	HT-2038	•11-03-0006	HT-1353	•11-02-0003
6438	.100/.125 2,54/3,17	20-22 (0,50/0,35mm)²	.095 2,41	HTR-2445-A	11-01-0026	HTA-2174	•11-03-0016	N/A	N/A
6459	.100/.125 2,54/3,17	24-30 (0,20/0,05mm)²	.062 1,57	HTR-2262-A	•11-01-0037	HT-2759	11-03-0022	N/A	N/A
6482	.187/.218 4,74/5,53	14-18 (2,00/0,80mm)²	.140 3,55			HT-6277	11-03-0028	N/A	N/A
6722	.156/2,18 3,91/5,53	12-14 (3,25/2,00mm)²	.155 3,94						
6757	N/A	#38 AWG (0,0009mm)²	.039 1,00						
6770	.125/.156 3,17/3,96	18-24 (0,80/0,20mm)²	.110 2,79	HTR-1719-C	•11-01-0008	HT-2285	•11-03-0002	HT-1807	•11-02-0001
6772	.125/.156 3,17/3,96	18-24 (0,80/0,20mm)²	.110 2,79	HTR-1719-C	•11-01-0008	HT-2285	•11-03-0002	HT-1807	•11-02-0001
6796	.125/.156 3,17/3,96	24-30 (0,20/0,05mm)²	.070 1,77	HTR-2262-A	•11-01-0037	HT-2285	•11-03-0002	HT-1807	•11-02-0001
6838	.100/.125 2,54/3,17	18-24 (0,80/0,20mm)²	.110 2,79	HTR-2445-A	11-01-0026	HTA-2174	•11-03-0016		
6850	.156/.218 3,96/5,53	16-18 (1,30/0,80mm)²	.135 3,42	HTR-1031-E	•11-01-0084	HT-2066-A	11-03-0008		
6888-2	.125/.156 3,17/3,96	18-24 (0,80/0,20mm)²	.084 2,13						
6893	.156/.218 3,96/5,53	22-30 (0,35/0,05mm)²	.060 1,52	HTR-2262	•11-01-0006	HT-2038	•11-03-0006	HT-1353	•11-02-0003
6894	.156/.218 3,96/5,53	22-30 (0,35/0,05mm)²	.060 1,52	HTR-2262	•11-01-0006	HT-2038	•11-03-0006	HT-1353	•11-02-0003
6937	.125/.156 3,17/3,96	20-24 (0,50/0,20mm)²	N/A						
6963-3	.156/.187 3,96/4,74	14 (2,00mm)²	N/A						
6963-4	.156/.187 3,96/4,74	14 (2,00mm)²	N/A						
7238-7239	.156/.218 3,96/5,53	14-20 (2,00/0,50mm)²	.140 3,55	HTR-1031-E	•11-01-0084	HT-2038	•11-03-0006	HT-1353	•11-02-0003
7242	.125/.156 3,17/3,96	22-30 (0,35/0,05mm)²	.060 1,52	HTR-2445-A	11-01-0026	HTA-2174	•11-03-0016		
7258	.100/.125 2,54/3,17	22-26 (0,35/0,12mm)²	.060 1,52	HTR-2445-A	11-01-0026	HTA-2174	•11-03-0016	N/A	N/A
7291	.125/.156 3,17/3,96	18-24 (0,80/0,20mm)²	.110 2,79	HTR-1719-C	•11-01-0008	HT-2285	•11-03-0002	HT-1807	•11-02-0001
7293	.156/.218 3,96/5,53	22-30 (0,35/0,05mm)²	.060 1,52	HTR-2262	•11-01-0006	HT-2038	•11-03-0006	HT-1353	•11-02-0003
7423	.156/.218 3,96/5,53	16-22 (1,30/0,35mm)²	.120 3,04	HTR-1031-E	•11-01-0084	HT-2634	11-03-0017	HT-1353	•11-02-0003
7486	1.25/1.56 3,17/3,96	22-24 (0,35/0,20mm)²	.050 1,27						
7499	.125/.140 3,17/3,96	24-30 (0,20/0,05mm)²	.050 1,27						
7511	.125/.156 3,17/3,96	(2) 22 or (2) 24 (0,35/0,20mm)²	.050 1,27 ea.						
7676	.140/.187 3,55/4,74	14-22 (2,00/0,35mm)²	.140 3,55	HTR-2450-A	11-01-0101	HTA-2174	•11-03-0016		
7879-1	.125/.140 3,17/3,55	24-30 (0,20/0,05mm)²	.060 1,52						
8058	.156/.218 3,96/5,53	18-22 (0,80/0,35mm)²	.110 2,79						
8177	.100/.125 2,54/3,17	26-27 (0,13/0,10mm)²	.060 1,52						
8662	.125/.156 3,17/3,96	18-24 (0,80/0,20mm)²	.110 2,79						
8720	.125/.156 3,17/3,96	18-24 (0,80/0,20mm)²	.110 2,79						
8818	.100/.125 2,54/3,17	18-24 (0,80/0,20mm)²	.110 2,79	HTR-2445-A	11-01-0026	HTA-2174	•11-03-0016		
8960	.125/.156 3,17/3,96	18-24 (0,80/0,20mm)²	.110 2,79						
8980-3		14-20 (2,00/0,50mm)²		HTR-60623	11-01-0123	HT-60624	11-03-0037		

• U.S. Standard Product, available through Molex franchised distributors.

M

Hand Crimper Cross Reference

HAND CRIMP TOOL CROSS REFERENCE - When ordering Hand Crimp Tools, include terminal number to be crimped, wire size, insulation and send a 3 foot or 1 meter wire sample to Molex with the order.

Terminal	Stripping Length In. mm	Wire Range AWG (XX)²mm	Insul. Dia. Max. In. mm	Hand Tool Eng. No.	Hand Tool Order No.	Extractor Eng. No.	Extractor Order No.	Insertion Eng. No.	Insertion Order No.
8980-3		18-22 (0,80/0,35mm)²		N/A	N/A	HT-60624	11-03-0037		
8980-4		14-20 (2,00/0,50mm)²		HTR-60631	11-01-0152				
8993	.100/.125 2,54/3,17	18-24 (0,80/0,20mm)²	.110 2,79	HTR-2445-A	11-01-0026	HTA-2174	•11-03-0016		
30272						HT-60916	11-03-0042		
40140	.100/.125 2,54/3,17	18-24 (0,80/0,20mm)²	.110 2,79	HTR-2445-A	11-01-0026	HTA-2174	•11-03-0016		
40144	.125/.140 3,17/3,55	32-36 (0,03/0,01mm)²	.025 0,64	HTR-8500	•11-01-0103				
40445	.100/.125 2,54/3,17	24-30 (0,20/0,05mm)²	.062 1,57	HTR-2262-A	11-01-0037	HT-2759	11-03-0022	HT-2813	11-02-0004
40682	.110/.140 2,79/3,55	22-26 (0,35/0,12mm)²	.060 1,52	HTR-8532-A	11-01-0110				
41050	.125/.156 3,17/3,96	22-26 (0,35/0,12mm)²	.110 2,79	HTR-8558-A	11-01-0117				
41051	.125/.156 3,17/3,96	18-22 (0,80/0,35mm)²	.090/.140 2,28-3,55	HTR-8558-A	11-01-0177				
41422	.200/.230 5,08/5,84	10-12 (5,37/3,31mm)²	.120 3,04	HTR-60913A	11-01-0180				
41422	.200/.230 5,08/5,84	14-18 (2,00/0,80mm)²	.120 3,04	HTR-60913B	11-01-0181				
41483				HTR-60659	11-01-0133				
42477/78	.156/.218 3,96/5,53	16-18 (1,30/0,80mm)²	.140 3,55	HTR-60911-A	11-01-0179			HTA-60615	11-02-0022
70021	.100/.125 2,54/3,17	22-24 (0,35/0,20mm)²	.060 1,52	HTR-8519-B	11-01-0118	HT-71800	11-03-0036	HTA-60615	11-02-0022
70021	.100/.125 2,54/3,17	24-36 (0,20/0,01mm)²	.060 1,52	HTR-8519-A	11-01-0107	HT-71800	11-03-0036	HTA-60615	11-02-0022
70058	.100/.125 2,54/3,17	22-24 (0,35/0,20mm)²	.060 1,52	HTR-8519-B	11-01-0118	HT-71800	11-03-0036	HTA-60615	11-02-0022
70058	.100/.125 2,54/3,17	24-36 (0,20/0,01mm)²	.060 1,52	HTR-8519-A	11-01-0107	HT-71800	11-03-0036		
70075	.187/.218 4,74/5,53	14-18 (2,00/0,80mm)²	.140 3,55						
70076	.187/.218 4,74/5,53	18-22 (0,80/0,35mm)²	.110 2,79						
70078	.156/.187 3,96/4,74	18-22 (0,80/0,35mm)²	.110 2,79						
71851	.100/.125 2,54/3,17	22-24 (0,35/0,20mm)²	.060 1,52	HTR-8519-B	11-01-0118				
71851	.100/.125 2,54/3,17	24-36 (0,20/0,01mm)²	.060 1,52	HTR-8519-A	11-01-0107				
87048	.100/.125 2,54/3,17	26-28 (0,12-0,08mm)²	.110 2,79	HTR-60908	11-01-0176				
94506	.240/.270 6,10/6,86	14-18 (2,00/0,80mm)²	.145 3,68	HTR-60914-A	11-01-0182				

• U.S. Standard Product, available through Molex franchised distributors.

EUROPEAN HAND TOOLS

Terminal	Stripping Length In. mm	Wire Range AWG (XX)²mm	Insul. Dia. Max. In. mm	Hand Tool Order No.	Extractor Eng. No.	Extractor Order No.	Insertion Eng. No.	Insertion Order No.
1380/81	.156/.218 3,96/5,53	18-26 (0,80/0,12mm)²	.120 3,04	69008-0951	HT-2038	•11-03-0006	HT-1353	•11-02-0003
1560/61	.125/.156 3,17/3,96	18-24 (0,80/0,20mm)²	.110 2,79	69008-0952	HT-2285	•11-03-0002	HT-1807	•11-02-0001
2478	.100/.125 2,54/3,17	18-24 (0,80/0,20mm)²	.110 2,79	69008-0953	HTA-2174	•11-03-0016		
2578	.100/.125 2,54/3,17	22-26 (0,35/0,12mm)²	.060 1,52	69008-0954	HTA-2174	•11-03-0016		
2759	.100/.125 2,54/3,17	24-30 (0,20/0,05mm)²	.062 1,57	69008-0955	HT-2759	11-03-0022	HT-2813	11-02-0004
4809	.100/.125 2,54/3,17	22-30 (0,35/0,05mm)²	.062 1,57	69008-0956	HT-2759	11-03-0022		
5103	.102/.126 2,6/3,2	22-28 (0,33/0,08mm)²	.075 1,9	69008-0957				
5556/5558		16-28		69008-0724	HT-60630A	11-03-0038		

M

TM40/42™ Crimp Terminating Machines

- Designed to **metric standards**
- Independent conductor and insulation adjustments, with position indicator
- Quick release tooling feature for fast, simple changeover
- Universal feed adjustable to all Molex terminals
- 38.1mm stroke, no ram adjustment required
- Totally enclosed for operator safety including power shut off guard
- Accepts a wide variety of "plug in" terminator dies
- Bench mounted unit requires electrical power only
- Ability to remove upper crimp tooling without removing lower die

Specifications

Weight – 190 lbs. 86,2 kg approx.

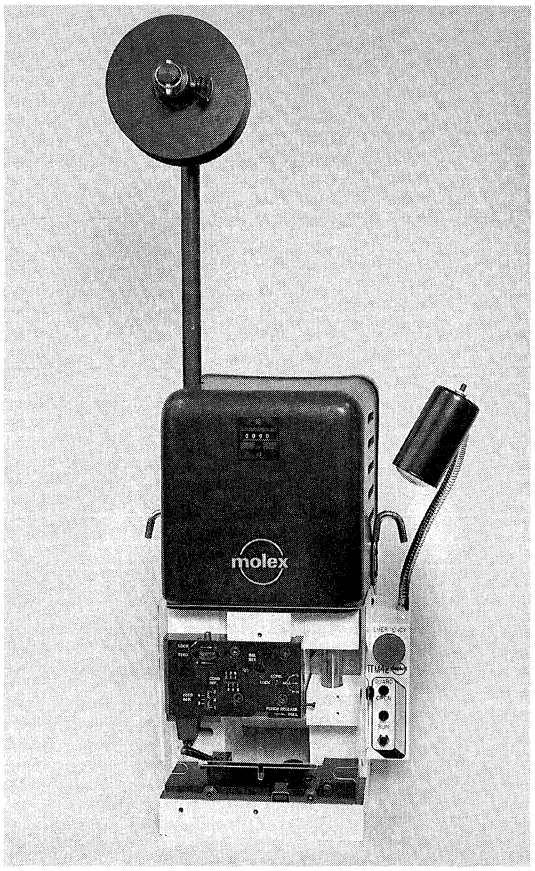
Electrical – 110 VAC, 60 Hz/220 VAC, 1 Phase, 50 Hz

Height – 1,150 mm (with reel mounted)

Width - 540 mm (with reel mounted)

Depth - 330 mm

Bench Space – Front 21" x 13" 53,3cm x 33,0cm deep (with reel)



TM 40/42 Press & Die Tooling Cross Reference

When ordering Crimp Dies, Machines or Hand Crimp Tools, include terminal number to be crimped, wire size, insulation and send a 3 foot or 1 meter wire sample to Molex with the order.

Ordering Information (Preferred Version in the U.S.)

TM40/42 PRESS ONLY	Eng. No.	Order No.
Used:	TM40DU	11-05-0021
Euro TM42 (220V)	69002-5000	69002-5000
US TM42 (110V)	69002-5001	69002-5001
Used TM42 (110V)	69002-5081	69002-5081

Not Available in the U.S.

TM42 Press Options	Order No.
Emergency Stop	69002-5070
Pneumatic Feed	69002-5621
Cable Trimmer	69002-5622
Band Cropper	69002-5623

M

Terminal	Terminator Die Only		TM40/42 Press & Die (110V-60Hz)		Spare Tooling Kit	
	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.
1189-1190	11-40-2001	T8300A	11-04-0197	TM42D8300A	11-40-3001	K8300A
1219	11-40-2165	T8369A	11-04-0640	TM42D8369A	11-40-3157	K8369B
1220	11-40-2166	T8369B	11-04-0641	TM42D8369B	11-40-3158	K8369B
1380-1381	11-40-2002	T8300B	11-04-0199	TM42D8300B	11-40-3002	K8300B
1433-1434	11-40-2003	T8300C	11-04-0201	TM42D8300C	11-40-3003	K8300C
1450-1451	11-40-2001	T8300A	11-04-0197	TM42D8300A	11-40-3001	K8300A
1457-1	11-40-2009	T8307A	11-04-0213	TM42D8307A	11-40-3009	K8307A
1457-2	11-40-2010	T8307B	11-04-0215	TM42D8307B	11-40-3010	K8307B
1508 Double Crimp	11-40-2205	T8393A	11-04-0613	TM42D8393A	11-40-3207	K8393A
1508-1 16-18 ga.	11-40-2118	T8351B	11-04-0588	TM42D8351B	11-40-3116	K8351B
16-20 ga.	11-40-2117	T8351A	11-04-0586	TM42D8351A	11-40-3115	K8351A
1560-1561 14-18 ga.	11-40-2004	T8302A	11-04-0203	TM42D8302A	11-40-3004	K8302A
1786-1787	11-40-2004	T8302A	11-04-0203	TM42D8302A	11-40-3004	K8302A
1793	11-40-2004	T8302A	11-04-0203	TM42D8302A	11-40-3004	K8302A
1797	11-40-2005	T8303A	11-04-0205	TM42D8303A	11-40-3005	K8303A
1854-1855	11-40-2006	T8302B	11-04-0207	TM42D8302B	11-40-3006	K8302B
1881-2	11-40-2083	T8300J	11-04-0396	TM42C8300J	11-40-3083	K8300J
1881-3	11-40-2084	T8300K	11-04-0398	TM42D8300K	11-40-3084	K8300K

TM40/42 Press & Die Tooling Cross Reference

When ordering Crimp Dies, Machines or Hand Crimp Tools, include terminal number to be crimped, wire size, insulation and send a 3 foot or 1 meter wire sample to Molex with the order.

Terminal	Terminator Die Only		TM40/42 Press & Die (110V-60Hz)		Spare Tooling Kit	
	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.
1900-1901	11-40-2163	T8368A	11-04-0626	TM42D8368A	11-40-3155	K8368A
1917	11-40-2005	T8303A	11-04-0205	TM42D8303A	11-40-3005	K8303A
1929	11-40-2014	T8311A	11-04-0223	TM42D8311A	11-40-3014	K8311A
1943	11-40-2035	T8319A	11-04-0356	TM42D8319A	11-40-3035	K8319A
2012	11-40-2005	T8303A	11-04-0205	TM42D8303A	11-40-3005	K8303A
2014	11-40-2011	T8303B	11-04-0217	TM42D8303B	11-40-3011	K8303B
2046-2047	11-40-2164	T8368B	11-04-0639	TM42D8368B	11-40-3156	K8368B
2107 18-24 ga. 24-30 ga.	11-40-2014 11-40-2013	T8311A T8311B	11-04-0221	TM42D8311B	11-40-3013	K8311B
2123	11-40-2014	T8311A	11-04-0223	TM42D8311A	11-40-3014	K8311A
2125	11-40-2013	T8311B	11-04-0221	TM42D8311B	11-40-3013	K8311B
2151-2152	11-40-2002	T8300B	11-04-0199	TM42D8300B	11-40-3002	K8300B
2176	11-40-2015	T8312A	11-04-0226	TM42D8312A	11-40-3015	K8312A
2189-2190	11-40-2006	T8302B	11-04-0207	TM42D8302B	11-40-3006	K8302B
2192	11-40-2003	T8300C	11-04-0201	TM42D8300C	11-40-3003	K8300C
2269	11-40-2001	T8300A	11-04-0197	TM42D8300A	11-40-3001	K8300A
2273	11-40-2002	T8300B	11-04-0199	TM42D8300B	11-40-3002	K8300B
2282-2283	11-40-2121	T8354A	11-04-0598	TM42D8354A	11-40-3119	K8354A
2328	11-40-2015	T8312A	11-04-0226	TM42D8312A	11-40-3015	K8312A
2477-2478	11-40-2096	T8301AX	11-04-0418	TM42D8301X	11-40-3096	K8301AX
2482 (10-16 ga.)	11-40-2174	T8364B	11-04-0709	TM42D8364B	11-40-3239	K8364B
2576	11-40-2015	T8312A	11-04-0226	TM42D8312A	11-40-3015	K8312A
2578	11-40-2097	T8301BX	11-04-0420	TM42D8301BX	11-40-3097	K8301BX
2698	11-40-2006	T8302B	11-04-0226	TM42D8312A	11-40-3015	K8312A
2717	11-40-2006	T8302B	11-04-0207	TM42D8302B	11-40-3006	K8302B
2759	11-40-2100	T8304AX	11-04-0426	TM42D8304AX	11-04-3100	K8304AX
2776 16-20 ga. 14-18 ga.	11-40-2118 11-40-2117	T8351B T8351A	11-04-0588 11-04-0586	TM42D8351B TM42D8351A	11-40-3116 11-40-3115	K8351B K8351A
2799	11-40-2154	T8312B	11-04-0629	TM42D8312B	11-40-3154	K8312B
2870-2871	11-40-2020	T8300E	11-04-0237	TM42D8300E	11-40-3020	K8300E
2878	11-40-2096	T8301AX	11-04-0418	TM42D8301AX	11-40-3096	K8301AX
2951	11-40-2021	T8317A	11-04-0239	TM42D8317A	11-40-3021	K8317A
3100	11-40-2011	T8303B	11-04-0217	TM42D8303B	11-40-3011	K8303B
3233	11-40-2022	T8308A	11-04-0241	TM42D8308A	11-40-3022	K8308A
3399	11-40-2062	T8330B	11-04-0352	TM42D8330B	11-40-3062	K8330B
4018	11-40-2099	T8301DX	11-04-0710	TM42D8301DX	11-40-3099	K8301DX
4259	11-40-2101	T8304BX	11-04-0428	TM42D8304BX	11-40-3101	K8304BX
4268	11-40-2001	T8300A	11-04-0197	TM42D8300A	11-40-3001	K8300A
4272	11-40-2002	T8300B	11-04-0199	TM42D8300B	11-40-3002	K8300B
4292	11-40-2003	T8300C	11-04-0201	TM42D8300C	11-40-3003	K8300C
4295	11-40-2005	T8303A	11-04-0205	TM42D8303A	11-40-3005	K8303A
4296	11-40-2047	T8325A	11-04-0310	TM42D8325A	11-40-3047	K8325A
4366	11-40-2005	T8303A	11-04-0205	TM42D8303A	11-40-3005	K8303A
4428-1	11-40-2026	T8306B	11-04-0406	TM42D8306B	11-40-3026	K8306B
4428-7	11-40-2025	T8306A	11-04-0250	TM42D8306A	11-40-3025	K8306A
4529	11-40-2106	T8302C	11-04-0438	TM42D8302C	11-40-3107	K8302C
4549	11-40-2001	T8300A	11-04-0197	TM42D8300A	11-40-3001	K8300A
4550	11-40-2001	T8300A	11-04-0197	TM42D8300A	11-40-3001	K8300A
4559	11-40-2006	T8302B	11-04-0207	TM42D8302B	11-40-3006	K8302B
4573	11-40-2011	T8303B	11-04-0217	TM42D8303B	11-40-3001	K8303B
4578	11-40-2096	T8301AX	11-04-0418	TM42D8301AX	11-40-3096	K8031AX
4583	11-40-2075	T8337A	11-04-0380	TM42D8337A	11-40-3075	K8337A
4706	11-40-2042	T8324A	11-04-0293	TM42D8324A	11-40-3042	K8324A
4706-1	11-40-2042	T8324A	11-04-0293	TM42D8324A	11-40-3042	K8324A

TM40/42 Press & Die Tooling Cross Reference

When ordering Crimp Dies, Machines or Hand Crimp Tools, include terminal number to be crimped, wire size, insulation and send a 3 foot or 1 meter wire sample to Molex with the order.

Terminal	Terminator Die Only		TM40/42 Press & Die (110V-60Hz)		Spare Tooling Kit	
	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.
4706-2	11-40-2042	T8324A	11-04-0293	TM42D8324A	11-40-3042	K8324A
4706-3	11-40-2043	T8324B	11-04-0295	TM42D8324B	11-40-3043	K8324B
4785	11-40-2031	T8315A	11-04-0301	TM428315A	11-40-3031	K8315A
4787-1	11-40-2033	T8316A	11-04-0306	TM428316A	11-40-3033	K8316A
4787-2	11-40-2094	T8316B	11-04-0414	TM428316B	11-40-3094	K8316B
4809	11-40-2102	T8305AX	11-04-0430	TM42D8305AX	11-40-3102	K8305AX
4811	11-40-2029	T8310A	11-04-0277	TM42D8310A	11-40-3029	K8310A
4811-1	11-40-2039	T8310B	11-04-0279	TM42D8310B	11-40-3039	K8310B
4811A-3	11-40-2029	T8310A	11-04-0277	TM42D8310A	11-40-3029	K8310A
4811A-4	11-40-2039	T8310B	11-04-0279	TM42D8310B	11-40-3039	K8310B
4838	11-40-2096	T8301AX	11-04-0418	TM42D8301AX	11-40-3096	K8301AX
5005	11-40-2064	T8327A	11-04-0358	TM42D8327A	11-40-3064	K8327A
5006	11-40-2064	T8327A	11-04-0358	TM42D8327A	11-40-3064	K8327A
5008	11-40-2065	T8327B	11-04-0360	TM42D8327B	11-40-3065	K8327B
5009	11-40-2065	T8327B	11-04-0360	TM42D8327B	11-40-3065	K8327B
5103	11-40-2056	T8328A	11-04-0316	TM42D8328A	11-40-3056	K8238A
5139	11-40-2100	T8304AX	11-04-0426	TM42D8304AX	11-40-3100	K8304AX
5167	11-40-2181	T8377A	11-04-0667	TM42D8377A	11-40-3183	K8377A
5168	11-40-2191	T8377-B	11-04-0668	TM42D8377B	11-40-3196	K8377B
5175	11-40-2217	T63301A	11-04-0711	TM42D63301A	11-40-3219	K63301A
5190	11-40-2039	T8310B	11-04-0279	TM42D8310B	11-40-3039	K8310B
5194	11-40-2073	T8336A	11-04-0376	TM42D8336A	11-40-3073	K8336A
5205	11-40-2066	T8327C	11-04-0362	TM42D8327C	11-40-3066	K8327C
5206	11-40-2066	T8327C	11-04-0362	TM42D8327C	11-40-3066	K8327C
5225	11-40-2074	T8336B	11-04-0378	TM42D8336B	11-40-3074	K8336B
5230	11-40-2069	T8332A	11-04-0368	TM42D8332A	11-40-3069	K8332A
5241	11-40-2063	T8329A	11-04-0354	TM42D8329A	11-40-3063	K8329A
5263	11-40-2089	T8342A	11-04-0408	TM42D8342A	11-40-3056	K8328A
5294	11-40-2070	T8333A	11-04-0370	TM42D8333A	11-40-3070	K8333A
5298	11-40-2115	T8350A	11-04-0450	TM42D8350A	11-40-3113	K8350A
5378T & T2	11-40-2149	T8362A	11-04-0627	TM42D8362A	11-40-3143	K8362A
5394	11-40-2071	T8334A	11-04-0372	TM42D8334A	11-40-3071	K8334A
5479 (22-30 ga.)	11-40-2107	T8345A	11-04-0440	TM42D8345A	11-40-3108	K8345A
5556/5558 (18-24 ga.)	11-40-2119	T8352A	11-04-0594	TM42D8352A	11-40-3117	K8352A
5556/5558 (22-28 ga.)	11-40-2137	T8352B	11-04-0616	TM42D8352B	11-40-3133	K8352B
5556/5558 (16 ga.)	11-40-2187	T8352C	11-04-0660	TM42D8352C	11-40-3189	K8352C
5659	11-40-2091	T8343A	11-04-0412	TM42D8343A	11-40-3091	K8343A
6308	11-40-2003	T8300C	11-04-0201	TM42D8300C	11-40-3003	K8300C
6310	11-40-2001	T8300A	11-04-0197	TM42D8300A	11-40-3001	K8300A
6361	11-40-2203	T8387A	11-04-0732	TM42D8387A	11-40-3204	K8387A
6362	11-40-2203	T8387A	11-04-0732	TM42D8387A	11-40-3204	K8387A
6379	11-40-2096	T8301AX	11-04-0418	TM42D8301AX	11-40-3096	K8301AX
6438	11-40-2096	T8301AX	11-04-0418	TM42D8301AX	11-40-3096	K8301AX
6459	11-40-2100	T8304AX	11-04-0426	TM42D8304AX	11-40-3100	K8304AX
6482	11-40-2151	T8364A	11-04-0632	TM42D8364A	11-40-3144	K8364A
6722	11-40-2004	T8302A	11-04-0203	TM42D8302A	11-40-3004	K8302A
6757	11-40-2061	T8330A	11-04-0350	TM42D8330A	11-40-3061	K8330A
6770	11-40-2004	T8302A	11-04-0203	TM42D8302A	11-40-3004	K8302A
6772	11-40-2004	T8302A	11-04-0203	TM42D8302A	11-40-3004	K8302A
6778	11-40-2098	T8301CX	11-04-0712	TM42D8301CX	11-40-3098	K8301CX
6796	11-40-2006	T8302B	11-04-0207	TM42D8302B	11-40-3006	K8302B
6838	11-40-2096	T8301AX	11-04-0418	TM42D8301AX	11-40-3096	K8301AX
6873	11-40-2096	T8301AX	11-04-0418	TM42D8301AX	11-40-3096	K8301AX
6893	11-40-2003	T8300C	11-04-0201	TM42D8300C	11-40-3003	K8300C
6894	11-40-2003	T8300C	11-04-0201	TM42D8300C	11-40-3003	K8300C
7238	11-40-2131	T8300P	11-04-0608	TM42D8300P	11-40-3128	K8300P
7239	11-40-2131	T8300P	11-04-0608	TM42D8300P	11-40-3128	K8300P

TM40/42 Press & Die Tooling Cross Reference

When ordering Crimp Dies, Machines or Hand Crimp Tools, include terminal number to be crimped, wire size, insulation and send a 3 foot or 1 meter wire sample to Molex with the order.

Terminal	Terminator Die Only		TM40/42 Press & Die (110V-60Hz)		Spare Tooling Kit	
	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.
7242	11-40-2075	T8337A	11-04-0380	TM42D8337A	11-40-3075	K8337A
7258	11-40-2097	T8301BX	11-04-0420	TM42D8301BX	11-40-3097	K8301BX
7291	11-40-2004	T8302A	11-04-0203	TM42D8302A	11-40-3004	K8302A
7293	11-40-2003	T8300C	11-04-0201	TM42D8300C	11-40-3003	K8300C
7319	11-40-2032	T8315B	11-04-0303	TM42D8315B	11-40-3032	K8315B
7423	11-40-2214	T8396A	11-04-0737	TM42D8396A	11-40-3216	K8396A
7430	11-40-2027	T8309A	11-04-0736	TM42D8309A	11-40-3027	K8309A
7457	11-40-2034	T8318A	11-04-0312	TM42D8318A	11-40-3034	K8318A
7499	11-40-2172	T8307C	11-04-0669	TM42D8307C	11-40-3174	K8307C
7676	11-40-2015	T8312A	11-04-0226	TM42D8312A	11-40-3015	K8312A
7879	11-40-2037	T8322A	11-04-0273	TM42D8322A	11-40-3037	K8322A
8058	11-40-2002	T8300E	11-04-0237	TM42D8300E	11-40-3020	K8300E
8126	11-40-2173	T8371A	11-04-0670	TM42D8371A	11-40-3175	K8371A
8177	11-40-2095	T8344A	11-04-0416	TM42D8344A	11-40-3095	K8344A
8662	11-40-2036	T8321A	11-04-0269	TM42D8321A	11-40-3036	K8321A
8960	11-40-2036	T8321A	11-04-0269	TM42D8321A	11-40-3036	K8301DX
8980-3	11-40-2110	T8374A	11-04-0444	TM42D8347A	11-40-3110	K8347A
8980-4	11-40-2213	T8391A	11-04-0713	TM42D8391A	11-40-3215	K8391A
8993	11-40-2096	T8301AX	11-04-0418	TM42D8301AX	11-40-3096	K8301AX
30105	11-40-2176	T8372A	11-04-0671	TM42D8372A	11-40-3178	K8372A
30149-1	11-40-2182	T8376A	11-04-0672	TM42D8376A	11-40-3184	K8376A
30272	11-40-2216	T63300A	11-04-0714	TM42D63300A	11-40-3217	T63300A
30293	11-40-2226	T63307A	11-04-0734	TM42D63307A	11-40-3230	K63306A
40140	11-40-2096	T8301AX	11-04-0418	TM42D8301AX	11-40-3096	K8301AX
40144	11-40-2038	T8322B	11-04-0275	TM42D8322B	11-40-3038	K8322B
40391 1 Up	11-40-2153	T8365A	11-04-0633	TM42D8365A	11-40-3148	K8365A
40391 2 Up	11-40-2155	T8365B	11-04-0634	TM42D8365B	11-40-3150	K8365B
40445	11-40-2100	T8304AX	11-04-0426	TM42D8304AX	11-40-3100	K8304AX
40641	11-40-2009	T8301DX	11-04-0715	TM42D8301DX	11-40-3099	K8301DX
40682	11-40-2076	T8338A	11-04-0382	TM42D8338A	11-40-3076	K8338A
40901	11-40-2072	T8335A	11-04-0374	TM42D8335A	11-40-3072	K8335A
41050	11-40-2208	T8392A	11-04-0694	TM42D8392A	11-40-3210	K8391A
41422-1	11-40-2192	T8379A	11-04-0663	TM42D8379A	11-40-3193	K8379A
41422-2	11-40-2193	T8379B	11-04-0677	TM42D8379B	11-40-3194	K8379B
41483	11-40-2212	T8395A	11-04-0702	TM42D8395A	11-40-3214	K8395A
41817	11-40-2120	T8353A	11-04-0595	TM42D8353A	11-40-3118	K8353A
41951 (24-30)	11-40-2157	T8367A	11-04-0636	TM42D8367A	11-40-3152	K8367A
41951 (32-36)	11-40-2158	T8367B	11-04-0637	TM42D8367B	11-40-3153	K8367B
41951 (22-24)	11-40-2159	T8367C	11-04-0638	TM42D8367C	11-40-3154	K8367C
42001	11-40-2171	T8370A	11-04-0679	TM42D8370A	11-40-3173	K8370A
42023/4 (14-16)	11-40-2198	T8384A	11-04-0680	TM42D8384A	11-40-3198	K8384A
42023/4 (16-20)	11-40-2197	T8384B	11-04-0681	TM42D8384B	11-40-3199	K8384B
42138	11-40-2212	T8395A	11-04-0702	TM42D8395A	11-40-3214	K8395A
42251	11-40-2211	T8389A	11-04-0716	TM42D8389A	11-40-3213	K8389A
42278-1	11-40-2201	T8386A	11-04-0684	TM42D8386A	11-40-3203	K8386A
42297	11-40-2232	T63313A	11-04-0735	TM42D63313A	11-40-3234	K63313A
42464	11-40-2215	T8397A	11-04-0717	TM42D8397A	11-40-3218	K8397A
42477/78 (03 O.S.)	11-40-2234	T63310A	11-04-0706	TM42D63310A	11-40-3236	K63310A
42477/78 (06 O.S.)	11-40-2235	T63311A	11-04-0707	TM42D63311A	11-40-3237	K63311A
42555	11-40-2223	T63304A	11-04-0704	TM42D63304A	11-40-3225	K63304A
50011	11-40-2136	T8359A	11-04-0628	TM428359A	11-40-3132	K8359A
50012	11-40-2141	T8361A	11-04-0630	TM42D8361A	11-40-3135	K8361A
50013	11-40-2141	T8361A	11-04-0630	TM42D8361A	11-40-3135	K8361A
50034	11-40-2156	T8366A	11-04-0635	TM42D8366A	11-40-3151	K8366A
50058-8000 (28-32)	11-40-2245	T63315A	11-04-0731	TM42D63315A	11-40-3248	K63315A
50061-8000 (28-32)	11-40-2254	T63315B	11-04-0733	TM42D63315B	11-40-3258	K63315B
50079-8000 (26-28)	11-40-2245	T63315A	11-04-0731	TM42D63315A	11-40-3248	K63315A
50080-8000 (26-28)	11-40-2254	T63315B	11-04-0733	TM42D63315B	11-40-3258	K63315B
50125	11-40-2244	T63314A	11-04-0730	TM42D63314A	11-40-3247	K63314A
50133	11-40-2244	T63314A	11-04-0730	TM42D63314A	11-40-3247	K63314A
70021 (22-24)	11-40-2087	T8341C	11-04-0404	TM42D8341C	11-40-3087	K8341C
70021 (24-30)	11-40-2085	T8341A	11-04-0400	TM42D8341A	11-40-3085	K8341A
70021 (32-36)	11-40-2086	T8341B	11-04-0402	TM42D8341B	11-40-3086	K8341B

TM40/42 Press & Die Tooling Cross Reference

When ordering Crimp Dies, Machines or Hand Crimp Tools, include terminal number to be crimped, wire size, insulation and send a 3 foot or 1 meter wire sample to Molex with the order.

Terminal	Terminator Die Only		TM40/42 Press & Die (110V-60Hz)		Spare Tooling Kit	
	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.
70058 (22-24)	11-40-2090	T8331C	11-04-0410	TM42D8331C	11-40-3090	K8331C
70058 (24-30)	11-40-2068	T8331A	11-04-0366	TM42D8331A	11-40-3068	K8331A
70058 (32-36	11-40-2077	T8331B	11-04-0384	TM42D8331B	11-40-3077	K8331B
70075	11-40-2078	T8339A	11-04-0386	TM42D8339A	11-40-3078	K8339A
70076	11-40-2079	T8339B	11-04-0388	TM42D8339B	11-40-3079	K8339B
70078	11-40-2080	T8340A	11-04-0390	TM42D8340A	11-40-3080	K8340A
70816 (32-34)	11-40-2109	T8331D	11-04-0442	TM42D8331D	11-40-3109	K8331D
70918	11-40-2229	T63306A	11-04-0701	TM42D63306A	11-40-3230	K63306A
71851 (22-24)	11-40-2090	T8331C	11-04-0410	TM42D8331C	11-40-3090	K8331C
71851 (24-30)	11-40-2068	T8331A	11-04-0366	TM42D8331A	11-40-3068	K8331A
71851 (32-36)	11-40-2077	T8331B	11-04-0384	TM42D8331B	11-40-3077	K8331B
87048	11-40-2236	T63312A	11-04-0708	TM42D63312A	11-40-3238	K63312A
87050	11-40-2224	T63305	11-04-0705	TM42D63305A	11-40-3226	K63305A
87115 (24-28)	11-40-2218	T8398A	11-04-0718	TM42D8398A	11-40-3220	K8398A
87115 (28-32)	11-40-2222	T8398B	11-04-0719	TM42D8398B	11-40-3224	K8398B
87217	11-40-2219	T63302A	11-04-0703	TM42D63302A	11-40-3221	K63302A
90021	11-40-2147	T8363A	11-04-0631	TM42D8363A	11-40-3142	K8363
90198	11-40-2196	T8385A	11-04-0687	TM42D8385A	11-40-3197	K8385A

Euro TM42 Applicators

Not Available in the U.S.

Terminal	Terminator Order No.	Tool Kit Order No.	Terminal	Terminator Order No.	Tool Kit Order No.
90020/21-01XX	69001-1000	69001-2001	90028-05XX	69001-1003	69001-2017
90020/21-02XX	69001-1005	69001-2002	90028-06XX	69001-1009	69001-2018
90020/21-03XX	69001-1001	69001-2003	90119-0109/10/11	69001-1042	69001-2020
90020/21-04XX	69001-1006	69001-2004	90119-0021/22	69001-1019	69901-2021
90022/24-01XX	69001-1010	69001-2005	90119-0120/21/22	69001-1043	69001-2021
90022/24-02XX	69001-1011	69001-2006	90197-01XX	69001-1040	69001-2013
90022/24-03XX	69001-1012	69001-2007	90197-03XX	69001-1041	69001-2015
90022/24-04XX	69001-1013	69001-2008	90198-0001	69001-1024	69001-2025
90026/27-01XX	69001-1014	69001-2009	90212/90192	69001-1048	—
90026/27-02XX	69001-1015	69001-2010	90350-01XX	69001-1025	69001-2026
90026/27-03XX	69001-1016	69001-2011	90416-0111	69001-1027	69001-2028
90026/27-04XX	69001-1017	69011-2012			
90028-01XX	69001-1002	69001-2013			
90028-02XX	69001-1007	69001-2014			
90028-03XX	69001-1004	69001-2015			
90028-04XX	69001-1008	69001-2016			

NOTE: No Press & Die combination number exists in Europe

M

Bench Crimping Press

Molex 3BF Bench Press

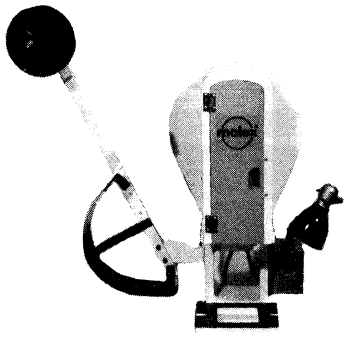
- 1,500 to 2,500 crimps per hour depending on operator speed
- Meets OSHA requirements
- Reliable consistent crimp heights
- Accommodates crimp dies, notching dies, and base unit with TM40/42 terminators

Specifications

Electrical – 110V AC, 60 Hz and 200V AC, 50 Hz

Size – 12" wide x 18" deep x 27" high 30cm x 46cm x 69cm

Weight – 250 lbs. 112,5kg



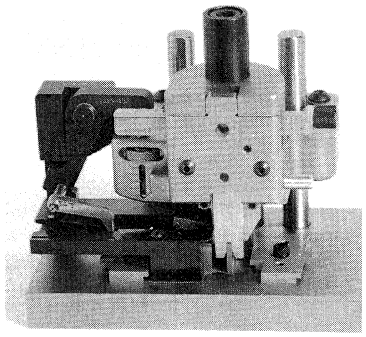
Ordering Information

	Eng. No.	Order No.
Press Only	P4979AU	11-05-0003

Base Unit/Terminator For Use With 3BF Press

Base Unit for Use in 3BF Press

- Adapts to 3BF press to accommodate TM40/42 terminator
- Low cost method of achieving flexibility in terminating various contact configurations in the same press
- Wire gauge changeover time is minimal and simplified
- Adjustable conductor crimp heights in increments of .001" 0,025mm; total adjustment of .025" 0,635mm
- Adjustable insulation crimp heights, increments of .008" 0,203mm; total adjustment of .064" 1,626mm
- Adjustable positive feed positioning
- No press ram adjustment after initial set-up
- Utilizes standard TM40/42 tooling that is readily available from the factory
- Fits many industry standard presses



Specifications

Size – 5" deep x 7½" wide X 6½" high 12,7cm x 19cm x 16,5cm

Weight – Approx. 16 lbs. 7,2kg

Ordering Information

Eng. No.	Order No.
BU 7179	11-19-3001

Order No.	Base Unit With Terminator		Change Over Terminator Dies		Spare Tooling Kit	
	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.
1189-1190	11-07-3001	UT8300A	11-40-2001	T8300A	11-40-3001	K8300A
1219	N/A	STD	11-40-2165	T8369A	11-40-3157	K8369A
1220	N/A	STD	11-40-2166	T8369B	11-40-3158	K8369B
1380-1381	11-07-3002	UT8300B	11-40-2002	T8300B	11-40-3002	K8300B
1433-1434	11-07-3003	UT8300C	11-40-2003	T8300C	11-30-3003	K8300C
1450-1451	11-07-3001	UT8300A	11-40-2001	T8300A	11-40-3001	K8300A
1457-2	11-07-3010	UT8307B	11-40-2010	T8307B	11-40-3010	K8307B
1457-1	11-07-3009	UT8307B	11-40-2009	T8307A	11-40-3009	K8307A
1508	11-07-3149	UT8393A	Contact Factory	Contact Factory	11-40-3207	K8393A
1508-1 16-20 ga.	11-07-3087	UT8351B	11-40-2118	T8351B	11-40-3116	K8351B
1508-1 14-18 ga.	11-07-3086	UT8351A	11-40-2117	T8351A	11-40-3115	K8351A
1560-1561	11-07-3004	UT8302A	11-40-2004	T8302A	11-40-3004	K8302A
1589	11-07-3002	UT8300B	11-40-2002	T8300B	11-40-3002	K8300B
1590	11-07-3002	UT8300B	11-40-2002	T8300B	11-40-3002	K8300B
1786-1787	11-07-3004	UT8302A	11-40-2004	T8302A	11-40-3004	K8302A
1793						
1797	11-07-3005	UT8303A	11-40-2005	T8303A	11-40-3005	K8303A
1854-1855	11-07-3006	UT8302B	11-40-2006	T8302B	11-40-3006	K8302B
1881-2	11-07-3040	UT8300J	11-40-2083	T8300J	11-40-3083	K8300J
1881-3	11-07-3041	UT8300K	11-40-2084	T8300K	11-40-3084	K8300K
1900-1901	N/A	STD	11-40-2163	T8368A		N/A
1917	11-07-3005	UT8303A	11-40-2005	T8303A	11-40-3005	K8303A
1929	11-07-3014	UT8311A	11-40-2014	T8311A	11-40-3014	K8311A

Base Unit/Terminator For Use With 3BF Press

Terminal	Base Unit With Terminator		Change Over Terminator Dies		Spare Tooling Kit	
	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.
1943	11-07-3035	UT8319A	11-40-2035	T8319A	11-40-3035	K8319A
2012	11-07-3005	UT8303A	11-40-2005	T8303A	11-40-3005	K8303A
2014	11-07-3011	UT8303B	11-40-2011	T8303B	11-40-3011	K8303B
2046-2047	N/A	STD	11-40-2164	T8368B		N/A
2107	11-03-3013	UT8311B	11-40-2013	T8311B	11-40-3013	K8311B
2123	11-07-3014	UT8311A	11-40-2014	T8311A	11-40-3014	K8311A
2125	11-07-3013	UT8311B	11-40-2013	T8311B	11-40-3013	K8311B
2151-2152	11-07-3002	UT8300B	11-40-2002	T8300B	11-40-3002	K8300B
2176	11-07-3015	UT8312A	11-40-2015	T8312A	11-40-3015	K8312A
2189-2190	11-07-3006	UT8302B	11-40-2006	T8302B	11-40-3006	K8302B
2192	11-07-3003	UT8300C	11-40-2003	T8300C	11-40-3003	K8300C
2269	11-07-3001	UT8300A	11-40-2001	T8300A	11-40-3001	K8300A
2273	11-07-3002	UT8300B	11-40-2002	T8300B	11-40-3002	K8300B
2282-2283	11-07-3090	UT8354A	11-40-2121	T8354A	11-40-3119	K8354A
2328	11-07-3015	UT8312A	11-40-2015	T8312A	11-40-3015	K8312A
2477-2478	11-07-3007	UT8301AX	11-40-2096	T8301AX	11-40-3096	K8301AX
2482		UT8364B	11-40-2174	T8364B		K8364B
2576	11-07-3015	UT8312A	11-40-2015	T8312A	11-40-3015	K8312A
2578	11-07-3151	UT8394B	Contact Factory	Contact Factory	11-40-3209	K8394B
2698	11-07-3015	UT8312A	11-40-2006	T8302B	11-40-3015	K8312A
2717	11-07-3006	UT8302B	11-40-2006	T8302B	11-40-3006	K8302B
2759	11-07-3012	UT8304AX	11-40-2100	T8304AX	11-40-3100	K8304AX
2776 16-20 ga.	11-07-3087	UT8351B	11-40-2118	T8351B	11-40-3116	K8351B
2776 14-18 ga.	11-07-3086	UT8351A	11-40-2117	T8351A	11-40-3115	K8351A
2799		UT8312B	11-40-2154	T8312B	11-40-2154	K8312B
2870	11-07-3020	UT8300E	11-40-2020	T8300E	11-40-3020	K8300E
2878	11-07-3007	UT8301AX	11-40-2096	T8301AX	11-40-3096	K8301AX
2951	11-07-3021	UT8317A	11-40-2021	T8317A	11-40-3021	K8317A
3100	11-07-3011	UT8303B	11-40-2011	T8303B	11-40-3011	K8303B
3233	11-07-3022	UT8308A	11-40-2022	T8308A	11-40-3022	K8308A
3399	11-07-3045	UT8330B	11-40-2062	T8330B	11-40-3062	K8330B
4018	11-07-3069	UT8301DX	11-40-2099	T8301DX	11-40-3099	K8301DX
4044	11-07-3145	UT8388A	Contact Factory	Contact Factory	11-40-3205	K8388A
4259	11-07-3046	UT8304BX	11-40-2101	T8304BX	11-40-3101	K8304BX
4268	11-07-3001	UT8300A	11-40-2001	T8300A	11-40-3101	K8300A
4272	11-07-3002	UT8300B	11-40-2002	T8300B	11-40-3002	K8300B
4292	11-07-3003	UT8300C	11-40-2003	T8300C	11-40-3003	K8300C
4295	11-07-3005	UT8303A	11-40-2005	T8303A	11-40-3005	K8303A
4296	11-07-3047	UT8325A	11-40-2047	T8325A	11-40-3047	K8325A
4366	11-07-3005	UT8303A	11-40-2005	T8303A	11-40-3005	K8303A
4428-1	11-07-3026	UT8306B	11-40-2026	T8306B	11-40-3026	K8306B
4428-7	11-07-3025	UT8306A	11-40-2025	T8306A	11-40-3025	K8306A
4529	11-07-3081	UT8302C	11-40-2106	T8302C	11-40-3107	K8302C
4549			11-40-2001	T8300A		
4550	11-07-3001	UT8300A	11-40-2001	T8300A	11-40-3001	K8300A
4559			11-40-2006	T8302B		
4573	11-07-3011	UT8303B	11-40-2011	T8303B	11-40-3001	K8303B
4578	11-07-3007	UT8301AX	11-40-2096	T8301AX	11-40-3096	K8301AX
4583	11-07-3050	UT8337A	11-40-2075	T8337A	11-40-3075	K8337A
4706	11-07-3051	UT8324A	11-40-2042	T8324A	11-40-3042	K8324A
4706-1	11-07-3051	UT8324A	11-40-2042	T8324A	11-40-3042	K8324A
4706-2	11-07-3051	UT8324A	11-40-2042	T8324A	11-40-3042	K8324A
4706-3	11-07-3052	UT8324B	11-40-2043	T8324B	11-40-3043	K8324B
4706-3 (overlap)	11-07-3083	UT8324B	11-40-2045	T8324D	11-40-3045	K8324D
4785	11-07-3031	UT8315A	11-40-2031	T8315A	11-40-3031	K8315A
4787-1	11-07-3033	UT8316A	11-40-2033	T8316A	11-40-3033	K8316A
4787-2	11-07-3053	UT8316A	11-40-2094	T8316B	11-40-3094	K8316B
4809	11-07-3017	UT8305AX	11-40-2102	T8305AX	11-40-3102	K8305AX
4811	11-07-3029	UT8310A	11-40-2029	T8310A	11-40-3029	k8310A
4811-1	11-07-3039	UT8310B	11-40-2039	T8310B	11-40-3039	K8310B
4811-A-3	11-07-3029	UT8310A	11-40-2029	T8310A	11-40-3029	K8310A
4811-A-4	11-07-3039	UT8310B	11-40-2039	T8310B	11-40-3039	K8310B
4838	11-07-3007	UT8301AX	11-40-2096	T8301AX	11-40-3096	K8301AX
5005	11-07-3054	UT8327A	11-40-2064	T8327A	11-40-3064	K8327A

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Base Unit/Terminator For Use With 3BF Press

Terminal	Base Unit With Terminator		Change Over Terminator Dies		Spare Tooling Kit	
	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.
5006	11-07-3054	UT8327A	11-40-2064	T8327A	11-40-3064	K8327A
5008	11-07-3055	UT8327B	11-40-2065	T8327B	11-40-3065	K8327B
5009	11-07-3055	UT8327B	11-40-2065	T8327B	11-40-3065	K8327B
5103	11-07-3056	UT8328A	11-40-2056	T8238A	11-40-3056	K8328A
5139	11-07-3012	UT8304AX	11-40-2100	T8304AX	11-40-3100	K8304AX
5167	11-07-3109	UT8377A	11-40-2181	T8377A	11-40-3183	K8377A
5168	11-07-3110	UT8377A	11-40-2191	T8377B	11-40-3196	K8377B
5175	11-07-3160	UT63301A	11-40-2217	T63301A	11-40-3219	K63301A
5190	11-07-3039	UT8310B	11-40-2039	T8310B	11-40-3039	K8310B
5194	11-07-3057	UT8336A	11-40-2073	T8336A	11-40-3073	K8336A
5205	11-07-3058	UT8237C	11-40-2066	T8327C	11-40-3066	K8327C
5206	11-07-3059	UT8327C	11-40-2066	T8327C	11-40-3066	K8327C
5225	11-07-3059	UT8336B	11-40-2074	T8336B	11-40-3074	K8336B
5230	11-07-3060	UT8332A	11-40-2069	T8332A	11-40-3069	K8332A
5241	11-07-3061	UT8329A	11-40-2063	T8329A	11-40-3063	K8329A
5263	11-07-3062	UT8324A	11-40-2089	T8342A	11-40-3056	K8328A
5294	11-07-3063	UT8333A	11-40-2070	T8333A	11-40-3070	K8333A
5298	11-07-3102	UT8350A	11-40-2115	T8350A	11-40-3113	K8350A
5378T & T2			11-40-2149	T8362A		
5394	11-07-3064	UT8334A	11-40-2071	T8334A	11-40-3071	K8334A
5479	11-07-3111	UT8345A	11-40-2107	T8345A	11-40-3108	K8345A
5556/5558	11-07-3088	UT8352A	11-40-2119	T8352A	11-40-3117	K8352A
5556T2/5558T2	11-07-3103	UT8352B	11-40-2137	T8352B	11-40-3133	K8352B
5556T3/5558T3	11-07-3112	UT8352C	11-40-2187	T8352C	11-40-3189	K8352C
5659	11-07-3001	UT8343A	11-40-2091	T8343A	11-40-3091	K8343A
6308	11-07-3003	UT8300C	11-40-2003	T8300C	11-40-3003	K8300C
6310	11-07-3001	UT8300A	11-40-2001	T8300A	11-40-3001	K8300A
6361	11-07-3144	UT8387A			11-40-3204	K8387A
6362	11-07-3144	UT8387A			11-40-3204	K8387A
6379	11-07-3007	UT8301AX	11-40-2096	T8301AX	11-40-3096	K8301AX
6438	11-07-3007	UT8301AX	11-40-2096	T8301AX	11-40-3096	K8301AX
6459						
6482	11-07-3113	UT8364A	11-40-2151	T8364A	11-40-3144	K8364A
6722						
6757	11-07-3066	UT8330A	11-40-2061	T8330A	11-40-3061	K8330A
6770	11-07-3004	UT8302A	11-40-2004	T8302A	11-40-3004	K8302A
6772	11-07-3004	UT8302A	11-40-2004	T8302A	11-40-3004	K8302A
6778	11-07-3067	UT8301CX	11-40-2098	T8301CX	11-40-3098	K8301CX
6796	11-07-3006	UT8302B	11-40-2006	T8302B	11-40-3006	K8302B
6838	11-07-3007	UT8301AX	11-40-2096	T8301AX	11-40-3096	K8301AX
6873	11-07-3007	UT8301AX	11-40-2096	T8301AX	11-40-3096	K8301AX
6893	11-07-3003	UT8300C	11-40-2003	T8300C	11-40-3003	K8300C
6894	11-07-3003	UT8300C	11-40-2003	T8300C	11-40-3003	K8300C
7238	11-07-3098	UT8300P	11-40-2131	T8300P	11-40-3128	K8300P
7239	11-07-3098	UT8300P	11-40-2131	T8300P	11-40-3128	K8300P
7242	11-07-3050	UT8337A	11-40-2075	T8337A	11-40-3075	K8337A
7258	11-07-3008	UT8301BX	11-40-2097	T8301BX	11-40-3097	K8301BX
7291	11-07-3004	UT8302A	11-40-2004	T8302A	11-40-3004	K8302A
7293	11-07-3003	UT8300X	11-40-2003	T8300C	11-40-3003	K8300C
7319	11-07-3032	UT8315B	11-40-2032	T8315B	11-40-3032	K8351B
7423	11-07-3216	UT8396A	11-40-2214	T8396A	11-40-3216	K8396A
7430	11-07-3027	UT8309A	11-40-2027	T8309A	11-40-3027	K8309A
7457	11-07-3034	UT8318A	11-40-2034	T8318A	11-40-3034	K8318A
7499	11-07-3114	UT8307C	11-40-2172	T8307C	11-40-3200	K8307C
7676	11-07-3015	UT8312A	11-40-2015	T8312A	11-40-3015	K8312A
7879	11-07-3037	UT8322A	11-40-2037	T8322A	11-40-3037	K8322A
8058	11-07-3020	UT8300E	11-40-2020	T8300E	11-40-3020	K8300E
8126	11-07-3115	UT8371A	11-40-2173	T8371A	11-40-3175	K8371A
8177	11-07-3068	UT8344A	11-40-2095	T8344A	11-40-3095	K8344A
8862	11-07-3036	UT8321A	11-40-2036	T8321A	11-40-3036	K8321A
8818/8918	11-07-3069	UT8301BK	11-40-2099	T8301DX	11-40-3099	K8301DX
8960	11-07-3036	UT8321A	11-40-2036	T8321A	11-40-3096	K8321A
8980-3	11-07-3082	UT8347A	11-40-2110	T8347A	11-40-2110	K8347A

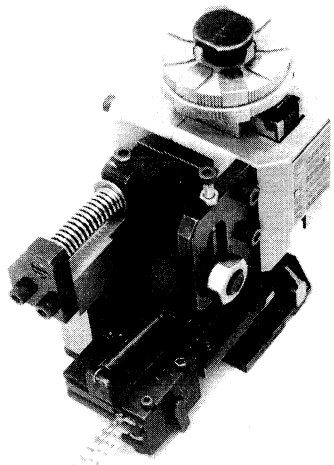
Base Unit/Terminator For Use With 3BF Press

Terminal	Base Unit With Terminator		Change Over Terminator Dies		Spare Tooling Kit	
	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.
8980-4	11-07-3147	UT8391A	11-40-2213	T8391A	11-40-3215	K8391A
30105	11-07-3116	UT8372A	11-40-2176	T8372A	11-40-3178	K8372A
30149-1	11-07-3142	UT8367A	11-40-2182	T8376A	11-40-3184	K8376A
30272	11-07-3159	UT63300A	11-40-2216	T63300A	11-40-3217	T63300A
40140	11-07-3007	UT8301AX	11-40-2096	T8301AX	11-40-3096	K8301AX
40144	11-07-3038	UT8322B	11-40-2038	T8322B	11-40-3038	K8322B
40229	11-07-3007	UT8301AX	11-40-2097	T8301BX	11-40-3097	K8301BX
40391-1 Up	11-07-3117	UT8365A	11-40-2153	T8365A	11-40-3148	K8365A
40391-2 Up	11-07-3118	UT8365B	11-40-2155	T8365B	11-40-3150	K8365B
40445	11-07-3012	UT8304AX	11-40-2100	T8304AX	11-40-3100	K8304AX
40641	11-07-3069	UT8301DX	11-40-2099	T8301DX	11-40-3099	K8301DX
40682	11-07-3070	UT8338A	11-40-2076	T8338A	11-40-3076	K8338A
40901	11-07-3071	UT8335A	11-40-2072	T8335A	11-40-3072	K8335A
41050	11-07-3148	UT8392A	11-40-2208	T8392A	11-40-3210	K8391A
41422-1	11-07-3123	UT8379A	11-40-2192	T8379A	11-40-3193	K8379A
41422-2	11-07-3124	UT8379B	11-40-2193	T8379B	11-40-3194	K8379B
41483	11-07-3154	UT8395A	11-40-2212	T8395A	11-40-3214	K8395A
41817	11-07-3089	UT8353A	11-40-2120	T8353A	11-40-3118	K8343A
41951 (24-30)	11-07-3126	UT8367A	11-40-2157	T8367A	11-40-3152	K8367A
41951 (32-36)	11-07-3127	UT8367B	11-40-2158	T8367B	11-40-3153	K8367B
41951 (22-24)	11-07-3128	UT8367C	11-40-2159	T8367C	11-40-3154	K8367A
42001	11-07-3129	UT8370A	11-40-2171	T8370A	11-40-3173	K8370A
42023/4 (14-16)	11-07-3130	UT8384A	11-40-2198	T8384A	11-40-3198	K8384A
42023/4 (16-20)	11-07-3131	UT8384B	11-40-2197	T8384B	11-40-3199	K8384B
42138	11-07-3154	UT8395A	11-40-2212	T8395A	11-40-3214	K8395A
42251	11-07-3143	UT8389A	11-40-2211	T8389A	11-40-3213	K8389A
42278	11-07-3134	UT8386A	11-40-2201	T8386A	11-40-3203	K8386A
42464		UT8397A	11-40-2215	T8397A	11-40-3218	K8397A
42477/78	11-40-2234	T63310A	11-04-0706	TM40D63310A	11-40-3236	K63310A
42477/78	11-40-2235	T63311A	11-04-0707	TM40D63311A	11-40-3237	K63311A
42555	11-40-2223	T63304A	11-04-0704	TM40D63304A	11-40-3225	K63304A
50011	11-07-3135	UT8359A	11-40-2136	T8359A	11-40-3132	K8359A
50012	11-07-3136	UT8361A	11-40-2141	T8361A	11-40-3135	K8361A
50013		UT8361A	11-40-2141	T8361A	11-40-3135	K8361A
50034	11-07-3137	UT8366A	11-40-2156	T8366A	11-40-3151	K8366A
50058-8000 (28-32)	11-07-3169	UT63315A	11-40-2245	T63315A	11-40-3248	K63315A
50061-8000 (28-32)	11-07-3121	UT8383A	11-40-2194	T8383A	11-40-3195	K8383A
50079-8000 (26-28)	11-07-3169	UT63315A	11-40-2245	T63315A	11-40-3248	K63315A
50080-8000 (26-28)	11-07-3121	UT8383A	11-40-2194	T8383A	11-40-3195	K8383A
70021 (22-24)	11-07-3072	UT8341C	11-40-2087	T8341C	11-40-3087	K8341C
70021 (24-30)	11-07-3073	UT8341A	11-40-2085	T8341A	11-40-3085	K8341A
70021 (32-36)	11-07-3074	UT8341B	11-40-2086	T8341B	11-40-3086	K8341B
70058 (22-24)	11-07-3078	UT8331C	11-40-2090	T8331C	11-40-3090	K8331C
70058 (24-30)	11-07-3079	UT8331A	11-40-2068	T8331A	11-40-3068	K8331A
70058 (32-36)	11-07-3080	UT8331B	11-40-2077	T8331B	11-40-3077	K8331B
70075	11-07-3075	UT8339B	11-40-2078	T8339A	11-40-3078	K8339A
70076	11-07-3076	UT8339B	11-40-2079	T8339B	11-40-3079	K8339B
70078	11-07-3077	UT8340A	11-40-2080	T8340A	11-40-3080	K8340A
70816 (32-24)	11-07-3092	UT8331D	11-40-2109	T8331D	11-40-3109	K8331D
71851 (22-24)	11-07-3078	UT8331C	11-40-2090	T8331C	11-40-3090	K8331C
71851 (24-30)	11-07-3079	UT8331A	11-40-2068	T8331A	11-40-3068	K8331A
71851 (32-36)	11-07-3080	UT8331B	11-40-2077	T8331B	11-40-3077	K8331B
87048	11-40-2236	T63312A	11-04-0708	TM40D63312A	11-40-3238	K63312A
87050	11-40-2224	T63305	11-04-0705	TM40D63305A	11-40-3226	K63305A
87115/87116 (24-28 ga.)	11-07-3157	UT8398A	11-40-2218	T8398A	11-40-3220	K8398A
87115/87116 (28-32 ga.)	11-07-3158	UT8398B	11-40-2222	T8398B	11-40-3224	K8398B
87217	11-40-2219	T63302A	11-04-0703	TM40D63302A	11-40-3221	K63302A
90021	11-07-3140	UT8363A	11-40-2147	T8363A	11-40-3142	K8363A
SDX87217-9000	11-07-3161	UT63302A	Contact Factory	Contact Factory	11-40-3221	K63302A
90198	11-07-3141	UT8385A	11-40-2196	T8385A	11-40-3197	K8385A

M

Mini-Mac Universal Crimping Die

- Designed to run Molex-brand terminals
- Direct retrofit into competitive 'K' bench presses and 'T' presses on automatic wire processing machine
- Compatible with OEM presses offered by major producers (e.g. Artos, Filomat, Mecal, Osawa, Toyo, Jamco). Minor modifications may be required
- Available on lease basis only



Mini-Mac Tooling List

When ordering Mini-Mac Applicators include terminal number to be crimped, wire size, insulation and send a three foot or 1 meter wire sample to Molex with order.

Terminal	MINI-MAC		SPARE TOOLING KIT		Terminal	MINI-MAC		SPARE TOOLING KIT	
	Order No.	Eng. No.	Order No.	Eng. No.		Order No.	Eng. No.	Order No.	Eng. No.
1189-1190 (18 Dbl.)	11-18-2009	MA60706E	11-18-3009	K60706E	2477-2478	11-18-2021	MA60712A	11-18-3023	K60712A
1189-1190	11-18-2143	MA60800D	11-18-3134	K60800D					
1219-1220	11-18-2072	MA60723B	11-18-3068	K60723B	2576	11-18-2040	MA60711A	11-18-3040	K60711A
1380-1381 (Tight Ins.)	11-18-2007	MA60706C	11-18-3007	K60706C	2578	11-18-2022	MA60712B	11-18-3021	K60712B
1380-1381	11-18-2158	MA60800B	11-18-3149	K60800B	2697-1	11-18-2095	MA60742A	11-18-3091	K60742A
1433-1434	11-18-2008	MA60706D	11-18-3008	K60706D	2697-2 (Larger Ins.)	11-18-2096	MA60742B	11-18-3090	K60742B
1450-1451	11-18-2143	MA60800D	11-18-3134	K60800D	2717	11-18-2024	MA60707B	11-18-3024	K60707B
1457-1 (18-22 Awg)	11-18-2056	MA60719A	11-18-3052	K60719A	2759 (.045 Wide Cond.)	11-18-2065	MA60703B	11-18-3061	K60703B
1457-2 (14-18 Awg)	11-18-2057	MA60719B	11-18-3053	K60719B	2759	11-18-2065	MA60703B	11-18-3061	K60703B
1508	11-18-2144	MA60811A	11-18-3135	K60811A	2776 (14-18 Awg)	11-18-2046	MA60717A	11-18-3046	K60717A
1508 (16 & 18 Dbl.)	11-18-2157	MA60811B	11-18-3148	K60811B	2776 (18 Dbl.)	11-18-2144	MA60811A	11-18-3135	K60811A
1560-1561	11-18-2017	MA60707A	11-18-3017	K60707A	2776 (16-20 Awg)	11-18-2047	MA60717B	11-18-3047	K60717B
1589-1590	11-18-2158	MA60800B	11-18-3149	K60800B	2776 (16 & 18 Dbl.)	11-18-2157	MA60811B	11-18-3148	K60811B
1786-1787	11-18-2017	MA60707A	11-18-3017	K60707A	2799	11-18-2041	MA60711B	11-18-3041	K60711B
1793	11-18-2017	MA60707A	11-18-3017	K60707A	2870-2871	11-18-2012	MA60706H	11-18-3012	K60706H
1797	11-18-2051	MA60720A	11-18-3051	K60720A	2878	11-18-2021	MA60712A	11-18-3023	K60712A
1799	11-18-2130	MA60771A	11-18-3121	K60771A	30272	11-18-2164	MA60820A	11-18-3155	K60820A
1854-1855	11-18-2024	MA60707B	11-18-3024	K60707B	30407	11-18-2142	MA60807A	11-18-3133	K60807A
1881-2 (18-24 Awg)	11-18-2010	MA60706F	11-18-3010	K60706F	35000 (18 & 22 Awg)	11-18-2060	MA60721B	11-18-3056	K60721B
1881-3 (24-30 Awg)	11-18-2091	MA60706M	11-18-3086	K60706M	35000 (14-18 Awg)	11-18-2059	MA60721A	11-18-3055	K60721A
1900-1901	11-18-2147	MA60805B	11-18-3138	K60805B	40140	11-18-2021	MA60712A	11-18-3023	K60712A
					40144	11-18-2039	MA60713B	11-18-3039	K60713B
1917	11-18-2051	MA60720A	11-18-3051	K60720A	4018	11-18-2023	MA60712C	11-18-3022	K60712C
1929	11-18-2097	MA60749A	11-18-3092	K60749A					
1973	11-18-2011	MA60706G	11-18-3011	K60706G	40445	11-18-2065	MA60703B	11-18-3061	K60703B
2012	11-18-2051	MA60720A	11-18-3051	K60720A	40641	11-18-2100	M60753A	11-18-3095	K60753A
2046-2047	11-18-2146	MA60805A	11-18-3137	K60805A	41050 (18 Awg)	11-18-2168	MA60821B	11-18-3159	K60821B
2107 (18-24 Awg)	11-18-2097	MA60749A	11-18-3092	K60749A	41050 (22-24 Awg)	11-18-2093	MA60746A	11-18-3088	K60746A
2107 (24-30 Awg)	11-18-2098	MA60749B	11-18-3093	K60749B	41051	11-18-2115	MA60761A	11-18-3109	K60761A
2123	11-18-2097	MA60749A	11-18-3092	K60749A	41422-3 (14-18 Awg)	11-18-2081	MA60739B	11-18-3076	K60739B
2125	11-18-2098	MA60749B	11-18-3093	K60749B	41422-1 (10-12 Awg)	11-18-2080	MA60739A	11-18-3075	K60739A
2151-2152	11-18-2158	MA60800B	11-18-3149	K60800B	41483 (.180 Max. Ins.)	11-18-2149	MA60816A	11-18-3140	K60816A
2176	11-18-2040	MA60711A	11-18-3040	K60711A	41817	11-18-2106	MA60755A	11-18-3100	K60755A
2189-2190	11-18-2024	MA60707B	11-18-3024	K60707B	41951	11-18-2068	MA60727A	11-18-3064	K60727A
2192	11-18-2008	MA60706D	11-18-3008	K60706D	42001	11-18-2108	MA60757A	11-18-3102	K60757A
2269	11-18-2143	MA60800D	11-18-3134	K60800D	42023-42024	11-18-2087	MA60726A	11-18-3082	K60726A
2273	11-18-2158	MA60800B	11-18-3149	K60800B	42138 (.180 Max. Ins.)	11-18-2149	MA60816A	11-18-3140	K60816A
2328	11-18-2040	MA60711A	11-18-3040	K60711A	42172	11-18-2139	MA60743C	11-18-3130	K60743C

Mini-Mac Tooling List

When ordering Mini-Mac Applicators include terminal number to be crimped, wire size, insulation and send a three foot or 1 meter wire sample to Molex with order.

Terminal	MINI-MAC		SPARE TOOLING KIT		Terminal	MINI-MAC		SPARE TOOLING KIT	
	Order No.	Eng. No.	Order No.	Eng. No.		Order No.	Eng. No.	Order No.	Eng. No.
42251	11-18-2162	MA60775A	11-18-3153	K60775A	5556-T2 (22-28 Awg)	11-18-2003	MA60740B	11-18-3003	K60704B
42297	11-18-2152	MA60812A	11-18-3143	K60812A	5556-T3 (16 Awg)	11-18-2069	MA60704C	11-18-3065	K60704C
42477-42478 (.06 Offset)	11-18-2137	MA60804B	11-18-3126	K60804B	5558-T2 (22-28 Awg)	11-18-2003	MA60704B	11-18-3003	K60704B
42477-42478 (.03 Offset)	11-18-2134	MA60804A	11-18-3125	K60804A	5558-T3 (16 Awg)	11-18-2069	MA60704C	11-18-3065	K60704C
42555	11-18-2148	MA60809A	11-18-3139	K60809A	5659	11-18-2166	MA60819A	11-18-3157	K60819A
4268	11-18-2143	MA60800D	11-18-3134	K60800D	6308	11-18-2008	MA60706D	11-18-3008	K60706D
4272	11-18-2158	MA60800B	11-18-3149	K60800B	6310	11-18-2143	MA60800D	11-18-3134	K60800D
4292	11-18-2008	MA60706D	11-18-3008	K60706D	6338	11-18-2021	MA60712A	11-18-3023	K60712A
4295	11-18-2051	MA60720A	11-18-3051	K60720A	6361	11-18-2089	MA60736A	11-18-3084	K60736A
4366	11-18-2051	MA60720A	11-18-3051	K60720A	6362	11-18-2089	MA60736A	11-18-3084	K60736A
4529	11-18-2027	MA60707E	11-18-3027	K60707E	6379	11-18-2021	MA60712A	11-18-3023	K60712A
4549-4550	11-18-2143	MA60800D	11-18-3134	K60800D	6438	11-18-2021	MA60712A	11-18-3023	K60712A
4559	11-18-2024	MA60707B	11-18-3024	K60707B	6459	11-18-2065	MA60703B	11-18-3061	K60703B
4578	11-18-2021	MA60712A	11-18-3023	K60712A	6482	11-18-2036	MA60718A	11-18-3036	K60718A
4706	11-18-2042	MA60714A	11-18-3042	K60714A	6770-6772	11-18-2017	MA60707A	11-18-3017	K60707A
4706-1	11-18-2042	MA60714A	11-18-3042	K60714A	6838	11-18-2021	MA60712A	11-18-3023	K60712A
4706-2	11-18-2042	MA60714A	11-18-3042	K60714A	6873	11-18-2021	MA60712A	11-18-3023	K60712A
4706-3	11-18-2043	MA60714B	11-18-3043	K60714B	6893-6894	11-18-2008	MA60706D	11-18-3008	K60706D
4809	11-18-2109	MA60756A	11-18-3103	K60756A	70021 (32-36 Awg)	11-18-2015	MA60710B	11-18-3015	K60710B
4811 (.10 Max. Ins.)	11-18-2048	MA60702A	11-18-3048	K60702A	70021 (24-30 Awg)	11-18-2014	MA60710A	11-18-3014	K60710A
4811A-3 (.10 Max. Ins.)	11-18-2048	MA60702A	11-18-3048	K60702A	70021 (22-24 Awg)	11-18-2016	MA60710C	11-18-3016	K60710C
4811A-4 (.06 Max. Ins.)	11-18-2049	MA60702B	11-18-3049	K60702B	70058 (24-30 Awg)	11-18-2018	MA60709A	11-18-3018	K60709A
4811-1 (.06 Max. Ins.)	11-18-2049	MA60702B	11-18-3049	K60702B	70058 (32-34 Awg)	11-18-2020	MA60709C	11-18-3020	K60709C
4838	11-18-2021	MA60712A	11-18-3023	K60712A	70058 (22-24 Awg)	11-18-2019	MA60709B	11-18-3019	K60709B
50011-8	11-18-2090	MA60741A	11-18-3085	K60741A	71851 (24-30 Awg)	11-18-2018	MA60709A	11-18-3018	K60709A
50012-8	11-18-2122	MA60767A	11-18-3115	K60767A	71851 (22-24 Awg)	11-18-2019	MA60709B	11-18-3019	K60709B
5005-5006	11-18-2114	MA60762A	11-18-3108	K60762A	71851 (32-34 Awg)	11-18-2020	MA60709C	11-18-3020	K60709C
50058	11-18-2154	MA60815A	11-18-3145	K60815A	7238-7239	11-18-2013	MA60706J	11-18-3013	K60706J
50079	11-18-2156	MA60815B	11-18-3147	K60815B	7291	11-18-2017	MA60707A	11-18-3017	K60707A
50125	11-18-2155	MA60813B	11-18-3146	K60813B	7293	11-18-2008	MA60706D	11-18-3008	K60706D
50133	11-18-2153	MA60813A	11-18-3144	K60813A	7499	11-18-2101	MA60754A	11-18-3096	K60754A
50289	11-18-2160	MA60810A	11-18-3151	K60810A	7676	11-18-2040	MA60711A	11-18-3040	K60711A
50294	11-18-2161	MA60814A	11-18-3152	K60814A	7879 (.055 Wide Cond.)	11-18-2037	MA60713C	11-18-3037	K60713C
5103	11-18-2082	MA60740A	11-18-3077	K60740A	7879	11-18-2038	MA60713A	11-18-3038	K60713A
5139	11-18-2065	MA60703B	11-18-3061	K60703B	8058	11-18-2012	MA60706H	11-18-3012	K60706H
5167	11-18-2084	MA60712E	11-18-3079	K60712E	87048	11-18-2140	MA60808A	11-18-3131	K60808A
5168	11-18-2117	MA60763F	11-18-3111	K60763F					
5175	11-18-2107	MA60758A	11-18-3101	K60758A	87115-***0 (24-28 Awg)	11-18-2112	MA60760A	11-18-3106	K60760A
5194	11-18-2044	MA60716A	11-18-3044	K60716A	87115-***1 (28-32 Awg)	11-18-2116	MA60760B	11-18-3110	K60760B
5225	11-18-2045	MA60716B	11-18-3045	K60716B	87116-***0 (24-28 Awg)	11-18-2112	MA60760A	11-18-3106	K60760A
5230	11-18-2085	MA60737A	11-18-3080	K60737A	87116-***1 (28-32 Awg)	11-18-2116	MA60760B	11-18-3110	K60760B
5241	11-18-2083	MA60738A	11-18-3078	K60738A	8818-8819	11-18-2023	MA60712C	11-18-3022	K60712C
5263	11-18-2062	MA60722A	11-18-3058	K60722A	8980-3	11-18-2105	MA60750A	11-18-3099	K60750A
5294	11-18-2076	MA60731A	11-18-3071	K60731A	8993	11-18-2021	MA60712A	11-18-3023	K60712A
5298	11-18-2073	MA60730A	11-18-3069	K60730A	90100-0006	11-18-2079	MA60729A	11-18-3074	K60729A
5378T	11-18-2110	MA60733A	11-18-3104	K60733A	90100-0007	11-18-2079	MA60729A	11-18-3074	K60729A
5378T2	11-18-2110	MA60733A	11-18-3104	K60733A	90100-0007 (Cut-Off Ins.)	11-18-2135	MA60774A	11-18-3128	K60774A
5394-T (22-28 Awg)	11-18-2070	MA60728A	11-18-3066	K60728A	90100-0008	11-18-2074	MA60729B	11-18-3070	K60729B
5394-T2 (20-22 Awg)	11-18-2118	MA60728B	11-18-3112	K60728B	90100-0008 (Cut-Off Ins.)	11-18-2136	MA60774B	11-18-3129	K60774B
5479	11-18-2077	MA60732A	11-18-3072	K60732A	90100-0009	11-18-2078	MA60729C	11-18-3073	K60729C
5556-5558 (18-24 AWG)	11-18-2002	MA60704A	11-18-3002	K60704A	94506	11-18-2165	MA60817A	11-18-3156	K60817A

Mini-Mac Tooling List

When ordering Mini-Mac Applicators include terminal number to be crimped, wire size, insulation and send a three foot or 1 meter wire sample to Molex with order.

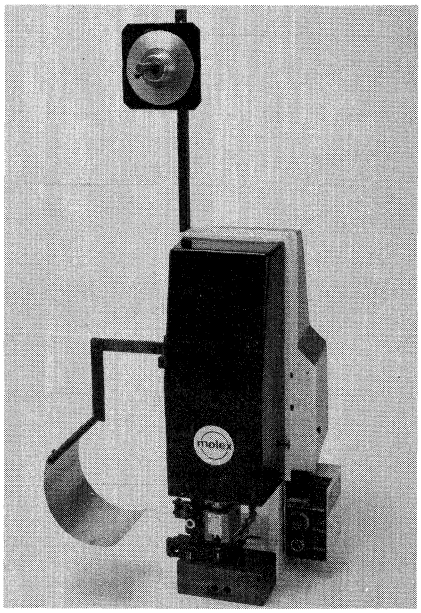
European Mini-Macs

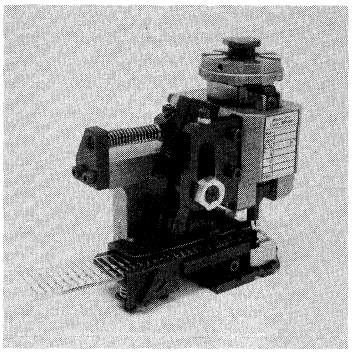
Terminal	MINI-MAC	SPARE TOOLING KIT	Terminal	MINI-MAC	SPARE TOOLING KIT
	Order No./Eng. No.	Order No./Eng. No.		Order No./Eng. No.	Order No./Eng. No.
1189/1190	69037-1100	69037-2100	5167	69037-1125	69037-2125
1380/81	69037-1103	69037-2103	5194	69037-1013	69037-2013
1433/34	69037-1105	69037-2105	5175	69037-1090	69037-2090
1450/51	69037-1100	69037-2100	5205	69037-1095	69037-2095
1457-1	69037-1106	69037-2106	5230	69037-1127	69037-2127
1457-2	69037-1107	69037-2107	5241	69037-1012	69037-2012
1508 (16-20 Awg)	69037-1066	69037-2066	5263	69037-1058	69037-2058
1560/61	69037-1108	69037-2108	5294	69037-1128	69037-2128
1589/90	69037-1103	69037-2103	5378	69037-1050	69037-2050
1786-87	69037-1108	69037-2108	5479	69037-1130	69037-2130
1793	69037-1108	69037-2108	5556/58 (18-24 Awg)	69037-1131	69037-2131
1854/55	69037-1110	69037-2110	5556/58 (22-28 Awg)	69037-1132	69037-2132
1943	69037-1007	69037-2107	5556/58 (16 Awg)	69037-1133	69037-2133
1973	69037-1114	69037-2114	5659	69037-1005	69037-2005
2107	69037-1116	69037-2116	6308	69037-1105	69037-2105
2125	69037-1116	69037-2116	6310	69037-1100	69037-2100
2151/52	69037-1103	69037-2103	6379	69037-1008	69037-2008
2189/90	69037-1110	69037-2110	6438	69037-1008	69037-2008
2192	69037-1105	69037-2105	6770/72	69037-1108	69037-2108
2269	69037-1100	69037-2100	6796	69037-1110	69037-2110
2273	69037-1103	69037-2103	6838	69037-1008	69037-2008
2477	69037-1008	69037-2008	6893	69037-1105	69037-2105
2478	69037-1008	69037-2008	6894	69037-1105	69037-2105
2578	69037-1010	69037-2010	70021 (22-24 Awg)	69037-1150	69037-2150
2717	69037-1110	69037-2110	70058 (24-30 Awg)	69037-1146	69037-2146
2759	69037-1027	69037-2027	70058 (22-24 Awg)	69037-1148	69037-2148
2878	69037-1008	69037-2008	71851 (22-24 Awg)	69037-1148	69037-2148
4706-1	69037-1124	69037-2124	71851 (24-30 Awg)	69037-1146	69037-2146
4706-2	69037-1124	69037-2124	7242	69037-1065	69037-2065
4706-3	69037-1087	69037-2087	7258	69037-1010	69037-2010
40140	69037-1008	69037-2008	7293	69037-1105	69037-2105
40229	69037-1010	69037-2010	7879	69037-1136	69037-2136
41051	69037-1088	69037-2088	82023	69037-1152	69037-2152
42023/24	69037-1040	69037-2040	82024	69037-1152	69037-2152
4268	69037-1100	69037-2100	8818/19	69037-1122	69037-2122
4272	69037-1103	69037-2103	8960	69037-1076	69037-2076
4292	69037-1105	69037-2105	8980-3C	69037-1079	69037-2079
4549/50	69037-1100	69037-2100	8993	69037-1008	69037-2008
4559	69037-1110	69037-2110	90020-04XX	69037-1054	69037-2054
4578	69037-1008	69037-2008	90100 (22-26 Awg)	69037-1155	69037-2155
4706	69037-1124	69037-2124	90103 (22-26 Awg)	69037-1155	69037-2155
4706-3	69037-1009	69037-2009	90119 (22-24 Awg)	69037-1017	69037-2017
4809	69037-1002	69037-2002	90019 (26-29 Awg)	69037-1018	69037-2018
4811-1	69037-1000	69037-2000	90264	69037-1077	69037-2077
4811-A4	69037-1001	69037-2001	90290 (28-32 Awg)	69037-1055	69037-2055
4838	69037-1008	69037-2008	90416	69037-1025	69037-2025
5005/6	69037-1085	69037-2085	90422	69037-1039	69037-2039
50011	69037-1072	69037-2072	90670 (22-26 Awg)	69037-1093	69037-2093
50013-8000	69037-1078	69037-2078	90670 (26-30 Awg)	69037-1094	69037-2094
50058-8000	69037-1091	69037-2091			
5103	69037-1011	69037-2011			
5159	69037-1027	69037-2027			

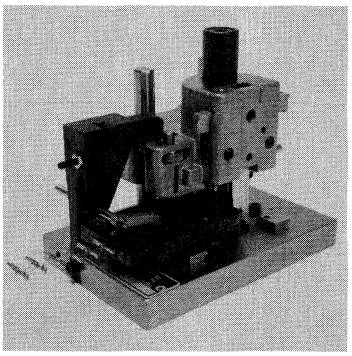
TM7 Universal Crimping Press

The TM7 press is a versatile terminating unit which can accommodate both the Mini-Mac Applicator and the Base Unit with TM40 terminator die. Both applications can be quickly removed for simple changeovers without press ram adjustment. The TM7 can be coupled with an OEM wire processing system and also can be bench mounted for hand-fed wire crimping which includes a foot trip switch with shield. This versatility allows you to choose the type of application to suit your production needs.

- ☐ Utilizes the Molex Mini-Mac applicator
- ☐ Utilizes the base unit with Molex TM40 terminators
- ☐ Industry standard stroke, no adjustment needed
- ☐ Bench mounted for hand-fed wire crimping
- ☐ Includes shielded foot trip switch
- ☐ 2,500 to 3,000 crimps per hour depending on operator speed
- ☐ Easily adaptable to an OEM wire processor
- ☐ Totally enclosed for operator safety







Specifications

Weight: 290 lbs. 94 kg approx.

Electrical: 110V 60 Hz

Height: 52" 132 cm with reel

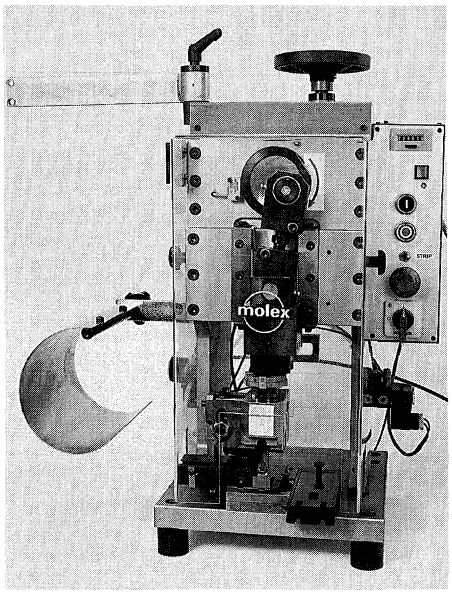
Bench Space: Front 24" X 18" 60,9cm X 45,7cm deep with reel arm

Ordering Information

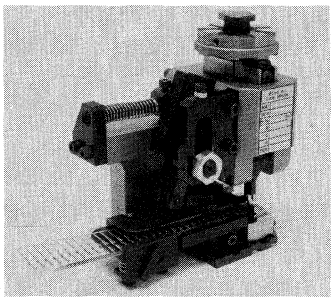
Eng. No.	Order No.	For Use With	Voltage/Hz
TM7-MM	11-05-0043	Mini-Mac Dies	110/60
TM7-UT	11-05-0044	Base Units	110/60
TM7-MM1	11-05-0046	Mini-Mac Dies	220/50
TM7-UT1	Contact Factory	Base Units	220/50

TM44 Universal Crimping Press

The Molex TM44 Crimp Press fulfills all the requirements of today's termination technology. Designed for quick changeover of all Molex side- or rear-feed Mini-Mac applicators, the low weight (approx. 110 lbs) allows use as a bench press as well as integration into all fully-automatic wire processing machines currently available.



- ☐ Utilizes the Molex Mini-Mac applicator
- ☐ Industry standard stroke; no adjustment needed
- ☐ Accepts Molex SCI44 Stripping Base and Crimp Process Monitor
- ☐ 2,500 to 3,000 crimps per hour depending on operator speed
- ☐ Easily adaptable to wire processor
- ☐ Totally enclosed for operator safety



Specifications

Weight: 110 lbs. 50 kg approx.

Electrical: 220/240V AC 3-Phase, 50/60 Hz

Height: 26" 660 mm without reel arm

Bench Space: 20" wide x 22" deep, 508mm x 559mm without reel arm

Ordering Information

Description	Eng. No.	EDP. No.
Press	TM-44	11-09-2074

Molex Japan Crimp Tooling Cross Reference

Preferred Tooling in Far East

Crimp Terminal Eng. No.	Modular Crimp Die Eng. No.	Crimp Die Eng. No.	Hand Tool Eng. No.	Extraction Tool Eng. No.	Insertion Tool Eng. No.
1189 1190	JM5866A	CDJ1487	JHTR1031C	J5800-003	
1380 1381	JM5866A	CDJ1487	JHTR1031C	J5800-003	
1433 1434	JM5866A	CDJ1487	JHTR2262	J5800-003	
1560 1561	JM5867A	CDJ1739	JHTR1719C	J5800-002	
1854 1855	JM5867A	CDJ1739	JHTR2262A (#01) JHTR2262J (#02)	J5800-002	
1881-2	JM5866A	CDJ1487			
2107-1B5N 2107-1B6N		CDJ2061			
2151 2152	JM5866A	CDJ1487	JHTR1031C	J5800-003	
2273	JM5866A	CDJ1487			
2478 2578	JM5868A	CDJ2242	JHTR2455A		
2759	JM5858A	CDJ2810 CDJ5259	JHTR2262A (#01) JHTR2262J (#02)		
4706-3		CDJ4997			
4809C	57156-3000				
5005 5006	JM5861A	CDJ5850	JHTR1719C	J5800-002	J5800-001
5008 5009	JM5861A	CDJ5850	JHTR2262A (#03) JHTR2262J (#02)	J5800-002	J5800-001
5017		CDJ2442			
5033-2 5033-4		CDJ5033			
5103	JM5857A	CDJ5851	JHTR5907		
5139 5159	JM5858A	CDJ5259	JHTR2262A (#01) JHTR2262J (#02)	J5800-004	
5167 5168	JM5868A	CDJ2242	JHTR2445A	J5800-004 (#04) 57092-6000 (#05)	
5175	JM5869A	CDJ5175	JHTR1031C		
5190-01	JM5865A	CDJ6164			
5194	JM5859A		JHTR5904	J5800-009	
5205 5206	JM5861A	CDJ5850	JHTR5902	J5800-002	
5225	JM5859A		JHTR5906	J5800-009	
5230	JM5864A		JHTR5905	J5800-008	
5241	JM5860A		JHTR2262A (#01) JHTR2262J (#02)	J5800-005	
5259	JM5858A	CDJ5259	JHTR2262A (#01) JHTR2262J (#02)	J5800-004	
5263	JM5996A		JHTR5974		
5266	JM5868A	CDJ5175	JHTR5908 (#06) JHTR5971 (#07)		
5294	JM5999A		JHTR5911	J5800-009	
5298	JM5998A	CDJ4997			
5378	57007-3000		57050-5000		
5394	JM5997A		JHTR5973		
5394T2	57025-3000		57029-5000		
5400	JM5995A		JHTR5975		
5479PBT	JM5993A		57005-5000	57005-6000	57005-6000
5479PBT2	57034-3000		57035-5000	57005-6000	57005-6000
5556 5558	57022-3000		57026-5000 (#08) 57027-5000 (#09)	57031-6000	
5556T2 5558T2	57038-3000		57064-5000	57031-6000	
5659	JM5857A	CDJ5659	JHTR5972		
8980-3C 8980-3C1	57102-3000				
8980-4C 8980-4C1	JM5866A				
40641	57153-3000				
41050	57009-3000				
41051	57010-3000				
50011	57030-3000		57032-5000	57105-6000	
50012 50013	57045-3000		57046-5000		
50031	57047-3000		57075-5000	57105-6000	
50034	57055-3000		57056-5000	57057-6000	
50038 50039	57084-3000		57085-5000 (#10) 57086-5000 (#11)		
50051	57052-3000		57053-5000		
50058	57067-3000		57068-5000	57072-6000	
50061	57069-3000		57070-5000	57072-6000	
50065	57071-3000			57094-6000	

M

Molex Japan Crimp Tooling Cross Reference

Preferred Tooling in Far East

Crimp Terminal Eng. No.	Modular Crimp Die Eng. No.	Crimp Die Eng. No.	Hand Tool Eng. No.	Extraction Tool Eng. No.	Insertion Tool Eng. No.
50079	57067-3000		57177-5000	57072-6000	
50080	57069-3000			57072-6000	
50083	57014-3000		57036-5000 (# 12) 57037-5000 (# 13)	57033-6000 (# 14) 57093-6000 (# 15)	57033-6000
50084	57014-3000		57036-5000 (# 16)	57033-6000 (# 14) 57093-6000 (# 15)	57033-6000
50087	57017-3000		57036-5000 (# 12) 57037-5000 (# 13)	57033-6000	57033-6000
50088	57017-3000		57036-5000 (# 16)	57033-6000	57033-6000
50089	57095-3000			57094-6000	
50095 50096	57096-3000		57097-5000 (# 17) 57114-5000 (# 18)	57120-6000	
50097	57107-3000		57118-5000	57115-6000	
50098	57108-3000		57119-5000	57115-6000	
50099	57067-3000			57072-6000	
50100	57069-3000			57072-6000	
50105 50106	57110-3000		57106-5000 (# 19) 57127-5000 (# 20)	57120-6000	
50118 50119	57084-3000		57085-5000 (# 10) 57086-5000 (# 11)		
50125	57138-3000		57140-5000	57072-6000	
57127 57128	57121-3000		57125-5000	57120-6000	
50133	57138-3000		57139-5000	57072-6000	
50146	57145-3000		57168-5000		
50147 50148	57144-3000		57132-5000		
50156	57122-3000		57135-5000		
50200	57030-3000			57105-6000	
50207	57182-3000		57187-5000		
50212	57175-3000		57176-5000		
50217	57183-3000		57189-5000 (# 08) 57190-5000 (# 09)		
50268	57203-3000				
70021-0004 70021-0006	57017-3000		57036-5000 (# 12) 57037-5000 (# 13)	57033-6000	57033-6000
70021-0021 70021-0023	57017-3000		57036-5000 (# 16)	57033-6000	57033-6000
70058-0004 70058-0006	57014-3000		57036-5000 (# 12) 57037-5000 (# 13)	57033-6000 (# 14) 57093-6000 (# 15)	57033-6000
70058-0022 70058-0024	57014-3000		57036-5000 (# 16)	57033-6000 (# 14) 57093-6000 (# 15)	57033-6000
87003	57090-3000				
87039	57091-3000				
87048-8001	57087-3000				
87050-90**	57181-3000				
87115-**0* 87116-**0*	57151-3000		57205-5000		
87115-**1* 87116-**1*	57173-3000		57206-5000		
90119-0111	57198-3000				
90146	57113-3000				

NOTES: # 01: # 22 ~ # 26AWG Ins. Dia. 1.3 ~ 1.7mm
02: # 26 ~ # 28AWG Ins. Dia. 0.8 ~ 1.3mm
03: # 24 ~ # 26AWG Ins. Dia. 1.3 ~ 1.7mm
04: Applies except for #51011 housing
05: Applies only for #51011 housing
06: # 22 ~ # 28AWG Ins. Dia. 1.1 ~ 1.7mm (UL1007)
07: # 22 ~ # 28AWG Ins. Dia. 2.0 ~ 2.5mm (UL1015)
08: # 18 ~ # 24AWG Ins. Dia. 1.5 ~ 2.2mm (UL1007)
09: # 18 ~ # 24AWG Ins. Dia. 2.3 ~ 3.1mm (UL1015)
10: AVS 0.3
11: CAVS 0.5
12: # 24 ~ # 26AWG Ins. Dia. 1.6mm Max.
13: # 24 ~ # 30AWG Ins. Dia. 1.6mm Max.
14: Applies except for # 51008 housing
15: Applies only for # 51008 housing
16: # 22 ~ # 24AWG Ins. Dia. 1.6mm Max.
17: # 16AWG Ins. Dia. 3.1 ~ 3.4mm
18: # 18AWG Ins. Dia. 2.8 ~ 3.0mm
19: # 22 ~ # 24AWG Ins. Dia. 2.2 ~ 2.5mm (UL1015)
20: # 18 ~ # 20AWG Ins. Dia. 1.7 ~ 3.0mm (UL1007, 1015)

Molex Japan Crimp Tooling Cross Reference

Preferred Tooling in Far East

Crimp Machine

M15	For Crimp Die
M15A	For Modular Crimp Die
57177-4000	For Modular Crimp Die

Transformer

M15T-A	From 110V ~ 240V to 110V

Hand Tool for QF50

Connector Eng. No.	Description	Tool Kit For QF50 Eng. No.	Base Ass'y Eng. No.	Hand Press Eng. No.
5320	Female	J5937	J5936	J5930
5350	Staggered	J5939	J5936	J5930
5360	Grid	J5938	J5936	J5930
5370	Dip 100x300	J5952	J5936	J5930
5380	Dip 100x600	J5953	J5936	J5930

Hand Tool for IDT

Connector Eng. No.	Description	Tool Eng. No.
5386NA	2.5 mm IDT Conn.	J5956
41948	2.54 mm IDT Conn.	57112-5000
51009-0801	SIL Boot	57060-5000
51009 Series	SIL Boot	57083-5000
51017/52056	1.5 mm RL Conn.	57066-5000
52484	Mi II IDT Rec.	57220-7000

Hand Tool for ROM Carrier

Connector Eng. No.	Description
5501 (24 Ckt.)	57179-5000
5501 (28 Ckt.)	57043-5000
5501 (32 Ckt.)	57162-5000

Semi-Automatic Machine

Connector Eng. No.	Description	Machine Eng. No.
5558	Rubber Seal Feeder (for 6,8SPC)	57149-7000
50210	5-Plug Metal Shell	57186-7000
52014-0810	XELOM-SIL (SIL only 8P)	57061-7000
52014 Series	XELOM-SIL2 (Sil Modular type)	57077-7000
51017/52056	XELOM-RL (1.5 mm RL Conn.)	57065-7000
52304	XELOM-AB (AB Conn.)	57165-7000

Fully-Automatic Machine

Connector Eng. No.	Description	Machine Eng. No.
5263	DOLPHIN (Crimping machine)	57040-8000
52051	XELOM-2BR (IDT machine)	57062-8000

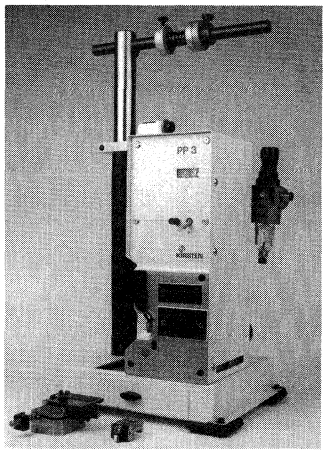
Others

Connector Eng. No.	Description	Tool Eng. No.
	Cable Cutter	J5933 (jig) + J5930 (hand press)
5479PBT	Carrier Cutting Die	57192-9000
51054-021* HSG.	Extractor	57161-6000
52047 HSG.	Cap Fitting Tool	57128-6000
52048 HSG.	Cap Fitting Tool	57129-6000
52116 HSG.	Cap Fitting Tool	57130-6000
52117 HSG.	Cap Fitting Tool	57131-6000
52212 HSG.	Cap Fitting Tool	57147-6000 (# 31) 57170-6000 (# 32)
52213 HSG.	Cap Fitting Tool	57148-6000 (# 31) 57171-6000 (# 32)
59201 Harness	AB Conn. Cable Checker	57167-9000
59539 Seal	Seal Fitting Tool	57160-6000

NOTES: # 31: AVSS-0.3
32: AVS-0.3

M

TM-80 Series Stripper Crimper



- Industry standard units (Kirsten, Crimp Technik, Artos brands, etc.)
- Applicators designed according to Molex specifications
- Equipment available stripper/crimper machines, crimp presses and dies
- Processes wires of less than 0.130 sq. mm cross section area

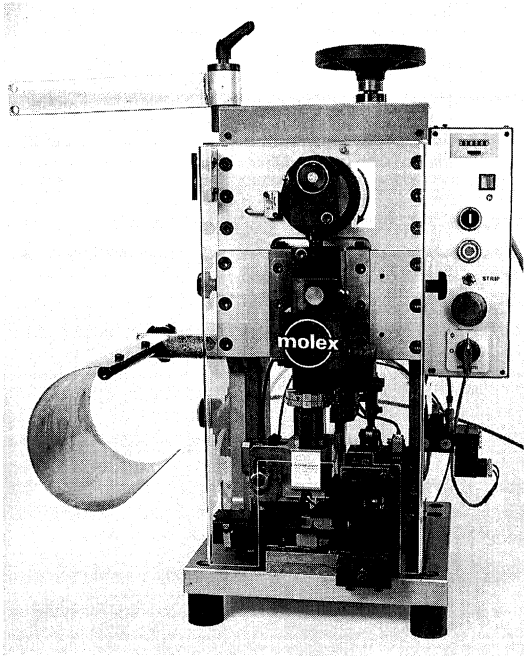
Ordering Information (Preferred Version in Europe)

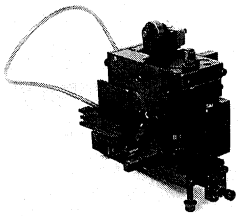
Terminal Order No.	AWG	Applicator Order No.	P.T. Kit Order No.
1854/1855	24-30	69015-6060	69015-6061
2478	18-24	69015-7000	69015-7001
5103	22-28	69015-6094	69015-6095
5263	22-28	69015-6070	69015-6071
87115/87116	24-28	69015-6075	69015-6076
87115/87116	28-32	69015-6080	69015-6081
90119-01XX	22-24	69015-1020	69015-1025
90119-01XX	26-28	69015-1021	69015-1030
90146-01XX	22-24	69015-1035	69015-1025
90146-01XX	26-28	69015-1036	69015-1030
90100/103	28-32	69015-6000	69015-6005
90100/103	22-26	69015-6001	69015-6010
90100/103	18-20	69015-6002	69015-6015
90290	28-32	69015-6025	69015-6030
90290	22-26	69015-6026	69015-6035
90290	18-20	69015-6027	69015-6040
90212	26-28	69015-6065	69015-6066

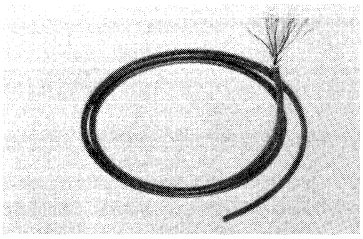
Ordering Information (Preferred Version in U.S.)

Terminal Order No.	AWG	Stripper Crimper Order No.	Eng. No.
50058	28-32	11-09-2064	TM80SC60912A
87050	22-26	11-09-2061	TM80SC60905A
87115/16	28-32	11-09-2055	TM80SC60902B
87115/16	24-28	11-09-2054	TM80SC60902A
8980-3CI	18-22	11-09-2059	TM80SC60903A
8980-4CI	18-22	11-09-2060	TM80SC60904A
90100-0007	28-32	11-09-2043	TM80SC60673A
90100-0008	22-26	11-09-2044	TM80SC60673B
90100-0009	18-20	11-09-2045	TM80SC60673C

TM-144 Stripper Crimper







The Molex TM-144 Stripper Crimper is a modular approach to wire processing. The TM-144 system consists of the TM44 direct drive crimp press, the SC144 stripping unit, and the Molex Mini-Mac applicator. The system enables the machine to strip insulation and crimp terminals in a one-cycle operation. Prepared harness forms and multi-conductor cables can be easily processed by this system.

The base of the system is the new TM44 press. This is a direct drive press, which eliminates noise associated with older flywheel presses.

The SC144 Stripper base is added next. This stripping unit is self contained, so that it can be installed and removed, while maintaining set-up adjustments. The stripper is cam-driven from the press, which allows easy set-up and adjustment via the press hand wheel.

The final component in the system is the Molex Mini-Mac applicator. The applicator is easily installed and removed from the press, and maintains all functions of normal termination. Removal of the stripper base allows the TM44 to function with the Mini-Mac as a normal crimp press.

- ☐ Adjustable from #10 through #24 AWG with .110" 2,99mm dia. insulation max.
- ☐ Strip Lengths from .08" to .75" 2mm to 19mm long
- ☐ 1,000 terminations average per hour, depending on operator skill
- ☐ Unit is non-applicator dependent and works with all existing Mini-Mac tooling**
- ☐ Independent conductor and insulation adjustment with position indicator
- ☐ Universal feed adjustable to all Molex terminals within wire AWG range
- ☐ Totally enclosed for operator safety
- ☐ Accepts the Molex crimp monitor for quality crimped contacts

Specifications

Electrical: 220/240 VAC - 3 Phase 50/60 Hz

Weight: 110 lbs. 50kg

Bench Space: 20" wide X 22" deep,
508mm wide x 559mm deep
without reel arm

Height: 26" 660mm without reel arm

Air: 30 PSIG (min.) for stripping operation

Free Wire Length: Approximately 1-3/4" 44,5mm

M

Ordering Information

Description	Eng. No.	Order No.
Stripper Crimper	TM-144	11-09-2073
Press	TM-44	11-09-2074
Stripper	SC-144	11-09-2075
Mini-Mac Applicator	***	***

** Some modifications may be required; consult factory before attempting to mount existing Molex Mini-Mac applicators into the TM-144 System.

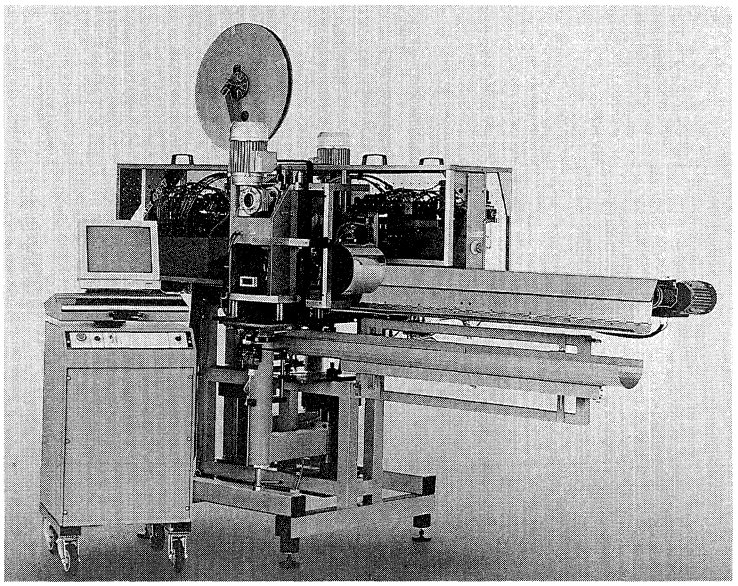
*** Consult factory or your customer service representative for availability of Mini-Mac applicators.

Wire Stripping and Terminating Equipment

Komax* Wire Stripping and Terminating Equipment

Compatible with Molex Tooling & Terminals

- D.C. servomotor wire feed system with integrated anti-slip control system (ACS)
- Electronic control by means of two intregrated microprocessors
- Operational commands entered via VDU terminal with menu driven software
- 180° pivoting workstations for easy press access and crimp tooling changes



General Specifications

Wire Sizes: 28 AWG to 10 AWG .05mm² to 6mm² Stranded
28 AWG to 16 AWG .05mm² to 1.5mm² Solid

Wire Length: Single end 1.5" - 214' 40mm-65m
Double end 2.0" - 214' 50mm-65m

Strip Length: 0.1" to 0.4" 2,5mm to 10mm

Capacity: max. 5000 pcs./hr (40R)
4400 pcs./hr (40T)
Dependent on application

For further information, contact KOMAX Corporation
1180 E. Corporate Grove Drive, Buffalo Grove, IL 60089
Phone: 708-537-6640 Fax: 708-537-5751

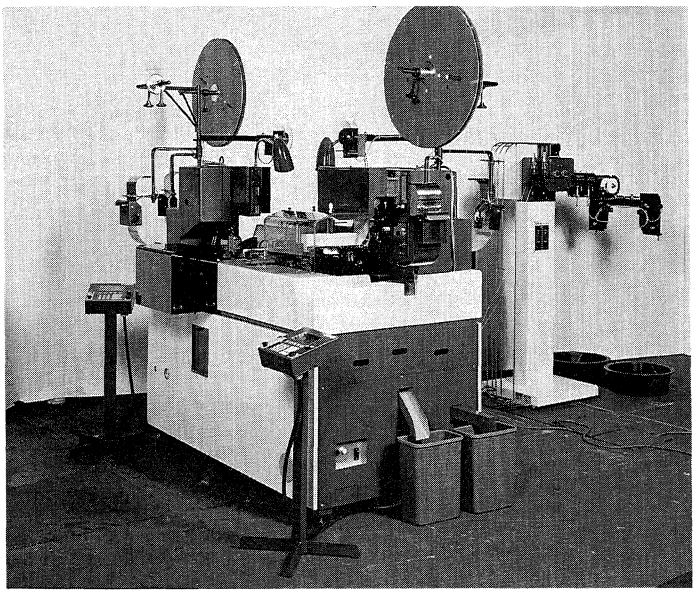
* Komax is a registered trademark of Komax Corporation

Shinmaywa™ Wire Stripping and Terminating Equipment

M

Compatible with Molex Tooling & Terminals

- Wire length measuring speed can be independently adjusted
- Graphic display operating panel facilitates input processing conditions
- Capable of storing 10 types of processing information
- Only one (1) pair of cutters is required as it is driven by a servomotor



General Specifications

Wire Sizes: 12 AWG to 28 AWG 2mm² to .05mm²

Wire Length: 2.6" to 393" 65mm to 100m

Strip Length: .039" to .394" 1mm to 10mm

Capacity: Maximum 3800 pcs./hr.
Dependent on application

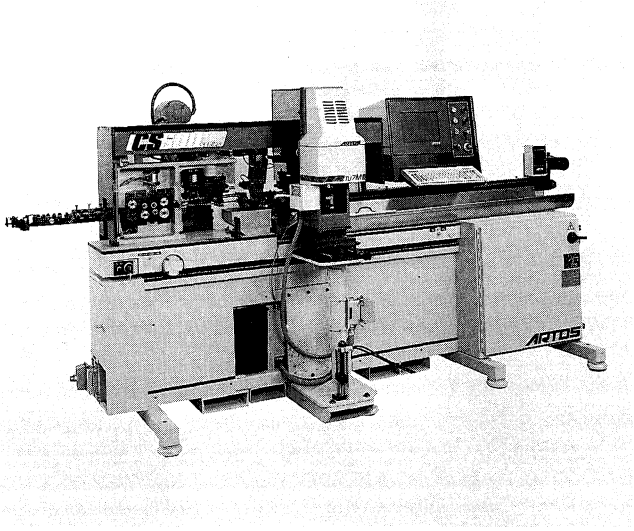
For further information, contact SMIC (America) Ltd.
2333 N. Waukegan Road, Bannockburn, IL 60015
Phone: 708-940-8872 Fax: 708-940-8873

Wire Stripping and Terminating Equipment

Artos* Wire Stripping and Terminating Equipment

Compatible with Molex Tooling & Terminals

- ☐ Stepper controlled cutter head jog open/close with position display
- ☐ Single tool set-up. Roll-up workstations
- ☐ VME BUS industrial computer. TAMMS host link for part program upload/download
- ☐ Harness program capability
- ☐ Ink-set marking with program storage



General Specifications

Wire Size: 10AWG to 26 AWG 6mm² to .13mm² Stranded
16 AWG to 26 AWG 1.5mm² to .13mm² Solid
Max. O.D.- .177" 4.5mm
Min. O.D. - Wire must be "pushable"

Wire Length: 1 1/4" to 100' 32mm to 30.5m

Strip Length: 1/8" to 1/2" 3mm to 12,7mm

Capacity: Max. approximately 3800 pcs./hr.
Dependent on application

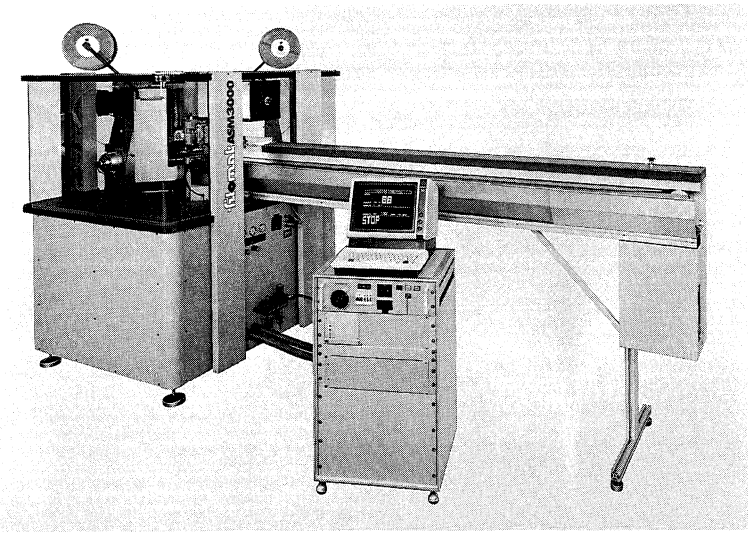
For further information, contact Artos Engineering Company
15600 W. Lincoln Avenue, New Berlin, WI 53151
Phone: 414-782-3300 Fax: 414-782-1021

* Artos is a registered trademark of Artos Engineering Company

Megomat™ Wire Stripping and Terminating Equipment

Compatible with Molex Tooling & Terminals

- ☐ P.C. Board control, UGA color monitor D.O.S. operating system, networkable
- ☐ Air glide press bases for easy access and set-up
- ☐ Robust design with enhanced mechanical and electrical features. Noise < 76dBa
- ☐ 45° to 90° press positioning for optimum performance. Complete guards



General Specifications

Wire Size: 8 AWG to 28 AWG @ 8mm² to 0.1mm²
Max. O.D.: .197" 5mm

Wire Length: 2 3/8" to 328' 60mm to 100m

Strip Length: .100" to .700" 2.5mm to 18m

Capacity: Max. 5000 pcs./hr.
Dependent on application

For further information, contact MEGOMAT USA, Inc.
21870 Watertown Road, Waukesha, WI 53186
Phone: 414-798-1080 Fax: 414-798-1889

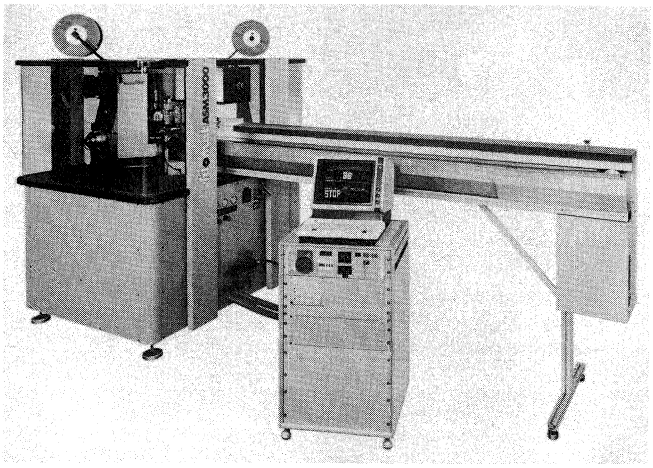
M

IDT/Crimp Wire Processing Equipment

Not available in the U.S.

AM-50 Series
Computer Controlled

This high performance automatic wire and terminal processing machine is computer controlled to process wire, which is fed to length, cut, insulation stripped at each end and terminals crimped to one or both ends. The software program is user-friendly, allowing the customer to quickly establish the production program, which can be memory (RAM) stored for re-use when required.



- ☐ High performance, compact size, robust design, operator easy
- ☐ Measures, cuts, strips and terminates to one or both ends of wire(s)
- ☐ Run-in, run-out press trolleys facilitate quick change of terminals
- ☐ User-friendly program in clear line form, most languages available
- ☐ Processes wire(s) from 0.25 to 6.0 mm^2 cross section
- ☐ For any Molex CRIMP and/or IDT
- ☐ Approx. 4,000 terminated wires, 1 meter long/hour

Specifications

Weight: 800 kg (basic machine)

Height: 1,700mm (excluding presses)

Length: 1,500mm

Width: 1,500mm

Power: 380-440V, 50-60 Hz, 10A

Pneumatic pressure: 6 bar

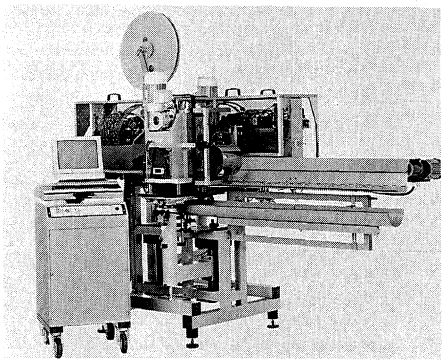
Air consumption: 6 liters/cycle

Contact Factory for Ordering Information

AM40 Automatic Wire Processing Machine

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The Komax 40 is designed to measure, cut to length, insulation strip and apply crimp terminals to one or both ends of wires. In addition, flat or ribbon cables of up to 20 millimeters width can be processed, using specially developed flat cable grippers, and terminated into I.D.T. type connectors. The machine accepts the mounting of many variations of crimping presses and applicators. The machine is computer controlled, with user friendly software and has the capability of storing the production program if desired.



- ☐ Minimum wire length 40mm
- ☐ Maximum wire length 100 meters
- ☐ Stripping length 2.5 - 10.0mm (both ends)
- ☐ Wire cross section
  0.1 - 6.0mm^2 (stranded)
  0.1 - 1.5mm^2 (solid)
- ☐ Up to 4,000 terminated wires per hour, 1 meter long, terminated both ends

Specifications:

Electrical: 110, 220–400V, 50-60 Hz

Pneumatic pressure: 5-8 bar

Air consumption: 6-10 liters/cycle

Floor space: 1910mm x 1520mm

Weight: 500 kg

Contact Factory for Ordering Information

Robotics Technology

Introduction

The use of industrial robots to complete the automation of P.C. boards has been growing in recent years. The flexibility of a robot assembly cell allows economical assembly of the "odd form" category of hard-to-automate components. The successful implementation of an odd-form robot assembly system depends on several factors. Of primary importance: proper design and quality of the component, a packaging system which preserves the quality at a reasonable cost, and feeding systems which reliably deliver components in proper orientation to the robot for assembly.

Connectors Designed for Automation

Molex has accepted the challenge of providing board-level interconnection systems with materials, features and tolerances demanded by automated assembly processes, both thru-hole and surface mount.

Packaging for Automation

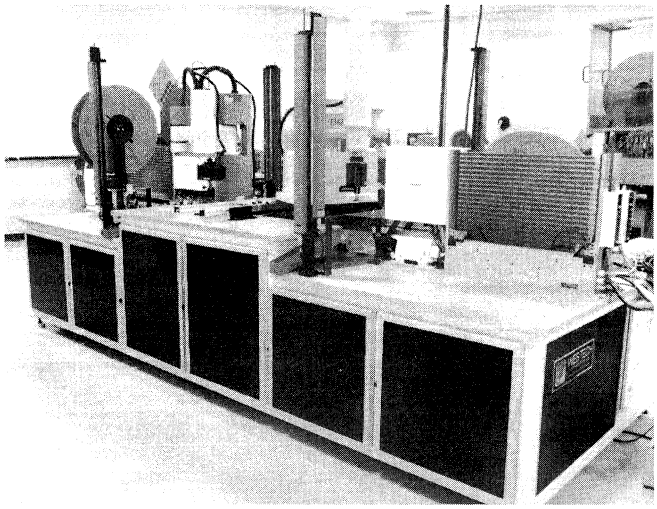
Packaging is provided to meet the demands of preserving quality and interfacing smoothly with automated warehousing while keeping costs reasonable.

Feeders and Delivery Systems

The Application Tooling Division has developed space-effective feeding systems which automatically de-package our connectors and accurately locate them for acquisition by a robot system. Molex delivery systems have been in operation for several years and are proven to contain all the elements for successful operation in an automated system.

Application Assistance

Molex Application Tooling Engineers are available to assist with integration of Molex product and feeders into robotic assembly systems. We can provide assistance in selecting robot end-effectors best suited to our products or provide custom tooling for unique applications.



Molex Robotic Cell for customer demonstrations

Vision Guided Systems

We will continue developing and testing products, packaging and delivery systems which operate with vision-guided robot assembly to keep pace with the quality demands of shrinking PCB spacings and increasing demands for flexibility.

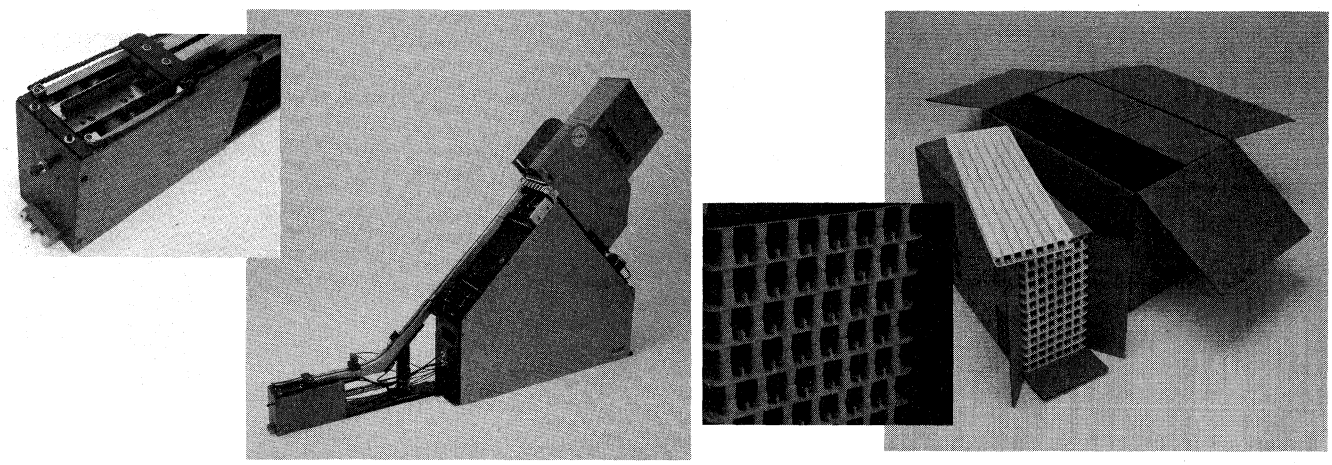
PC Board level interconnects designed for automated assembly have unique requirements:

- ☐ High accuracy on body-to-lead specifications and on lead-to-lead specifications
- ☐ Designed-in hold down features
- ☐ Packaging systems to preserve quality and provide a large on-line supply of components with minimal reload time
- ☐ Feeding systems designed to de-package and position components reliably at automated line rates

Molex has been supplying interconnection systems to fully automated PC board assembly customers since 1984. We have a full line of products, packaging systems and application tooling to meet the needs of the most demanding automated assembly project. We maintain a fully equipped robotics lab to develop new applications.

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Molex Automatic Carton Matrix Unloading Systems



The Molex Carton Matrix Delivery System will automatically unload thru hole and SMT board mounted connectors from trays and accurately locate them for pickup by an industrial robot. The tray concept was developed as a cost effective alternative to tubes without sacrificing the superior protection. This protection is necessary to an automated assembly process to preserve the features and lead tolerances that Molex designs into its connectors. The compact size of the carton allows it to fit easily into most automated warehousing and supply systems. An operator simply removes the end of the carton, loads it into the receiver bin and tilts up the receiver and within minutes 1,080 one inch connectors can be loaded.

The connectors are unloaded a row at a time without concern for matrix spacings. The connectors are then fed through a single track to a precision positioning end block. They are then positioned by the leads and escaped forward to provide robotic pickup on all four sides of the connector.

- **Quality** — The carton offers superior protection in an easy-to-handle and easy-to-warehouse package.
- **Automatic** — PLC controlled for continuous operation. Full communication capabilities with most robot I/O ports.
- **Adjustability** — End tooling can easily adjust to variable circuit size.
- **Accuracy** — Parts are precisely located and escaped forward for pickup on all four sides.
- **Flexibility** — Can be adapted to most connector types with a simple change part kit. Unit can be ordered in both left hand and right hand versions.
- **Productivity** — The unit is capable of holding a large volume of parts and delivering them on a 2-second cycle.
- **Continuous** — A "low part signal" allows a new carton of parts to be loaded while the unit is running.
- **Reliability** — This unit is designed for years of operation and is backed by an attractive field service policy.
- **Mountability** — Unit is supplied with precision mounting feet to preserve pickup location upon removal and reinstallation.

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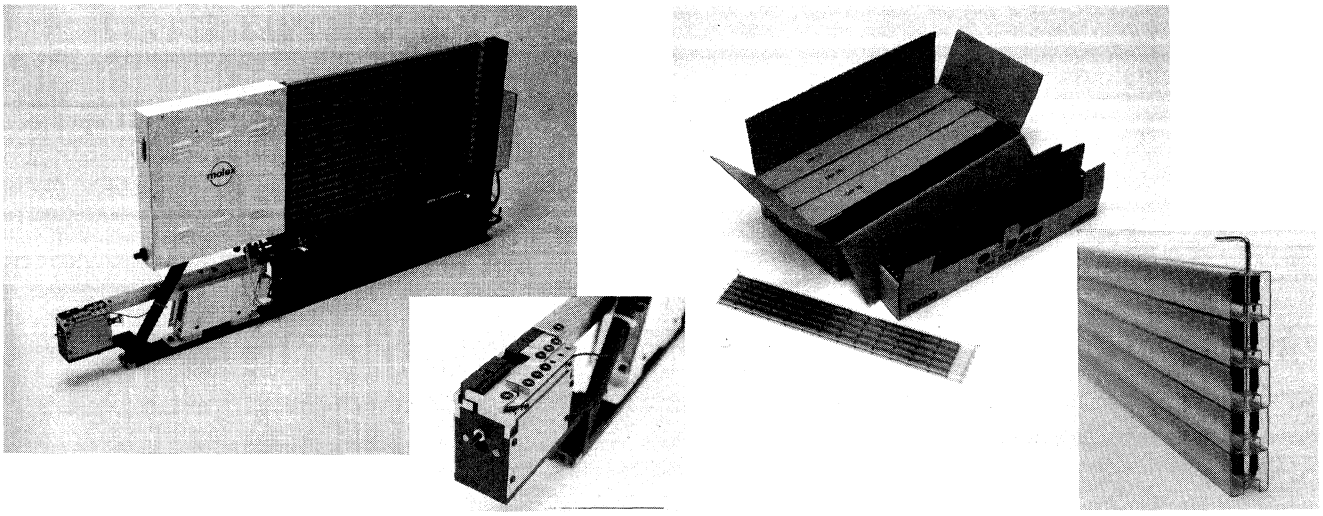
Ordering Information - AM-60586 Automatic Carton Matrix Unloading System

CHANGE PARTS KIT						Left Hand Assy. Base Unit & Change Parts Kit				Right Hand Assy. Base Unit & Change Parts Kit			
Connector Eng. No.	Ckt. Size	Kit Eng. No.	Kit Order No.	Qty. Parts Ckts. Min.	Qty. Parts Ckts. Max.	110VAC 50/60HZ Eng. No.	110VAC 50/60HZ Order No.	220VAC 50/60HZ Eng. No.	220VAC 50/60HZ Order No.	110VAC 50/60HZ Eng. No.	110VAC 50/60HZ Order No.	220VAC 50/60HZ Eng. No.	220VAC 50/60HZ Order No.
78863	60	AM60586-F1	11-31-5489	300	—	AM60586-16	11-20-1013	AM60586-24	11-20-1021	AM60586-1	11-20-1029	AM60586-8	11-20-1037
78872	60	AM60586-F2	11-31-8805	280	—	AM60586-17	11-20-1014	AM60586-25	11-20-1022	AM60586-3	11-20-1030	AM60586-9	11-20-1038
78817	30	AM60586-F3	11-31-8806	550	—	AM60586-18	11-20-1015	AM60586-26	11-20-1023	AM60586-4	11-20-1031	AM60586-10	11-20-1039
71355	4-16	AM60586-F4	11-31-8807	952	616	AM60586-19	11-20-1016	AM60586-27	11-20-1024	AM60586-5	11-30-1032	AM60586-11	11-20-1040
71006	20-62	AM60586-G1	11-31-5490	1008	360	AM60586-20	11-20-1017	AM60586-28	11-20-1025	AM60586-2	11-20-1033	AM60586-12	11-20-1041
6777	12-62	AM60586-G1	11-31-5490	1008	360	AM60586-20	11-20-1017	AM60586-28	11-20-1025	AM60586-2	11-20-1033	AM60586-12	11-20-1041
70227	6-72	AM60586-F5	11-31-8808	2880	360	AM60586-22	11-20-1019	AM60586-30	11-20-1027	AM60586-6	11-20-1035	AM60586-14	11-20-1043
70229	6-72	AM60586-F6	11-31-8809	3072	384	AM60586-23	11-20-1020	AM60586-31	11-20-1028	AM60586-7	11-20-1036	AM60586-15	11-20-1044
71003	20-62	AM60586-G1	11-31-5490	1008	360	AM60586-20	11-20-1017	AM60586-28	11-20-1025	AM60586-2	11-20-1033	AM60586-12	11-20-1011
95009	4-8	AM60586-F7	11-31-9657	1872	1404	AM60586-35	11-20-1124	AM60586-34	11-20-1125	AM60586-33	11-20-1126	AM60586-32	11-20-1097

Application Note:
If the application requires products not listed in the table above, the factory must be consulted to determine if the connector is available in trays. Also, a tool change kit may need to be developed for the proposed application. Tool kits can be developed within a 10 week lead time.

Robotic Delivery System

Molex Automatic Tube Magazine Unloading Systems



The Molex Tube Magazine Delivery System will automatically unload thru-hole and SMT board mounted connectors from tubes and accurately locate them for pickup by an industrial robot. Tubes have been a widely accepted means of packaging connectors due to their superior protection. This protection is necessary to an automated assembly process to preserve the features and lead tolerances that Molex designs into its connectors. The Molex tubes come packed in magazines which are held in a stack by two end-closure rods. An operator simply places a magazine of tubes into the delivery system, pulls out the two end-closure rods, and within minutes 480 one inch connectors can be loaded. The tube delivery system will automatically unload the bottom tube until empty. This tube is then cycled into an empty collection bin and a new fully-loaded tube is dropped into place.

After unloading, the connectors are gently vibrated to a precision positioning end block. They are then positioned by the leads and escaped forward to provide robotic pickup on all four sides of the connector.

- **Quality** — Tubes offer superior protection in an easy-to-handle magazine.
- **Compact** — 2-1/2" width makes efficient use of a robot's limited work envelope.
- **Automatic** — PLC controlled for continuous operation. Full communication capabilities with most robot I/O ports.
- **Adjustability** — End tooling can easily adjust to variable circuit size.
- **Flexibility** — Can be adapted to most connector types with a simple change part kit.
- **Accuracy** — Parts are precisely located and escaped forward for pickup on all four sides.
- **Productivity** — The unit is capable of holding a large volume of parts and can deliver on a 2-second cycle.
- **Continuous** — A "low part signal" allows a new magazine of parts to be loaded while the unit is running.
- **Reliability** — Years of proven installed operation with an attractive field service policy.
- **Mountability** — Unit is supplied with precision mounting feet to preserve pickup location upon removal and reinstallation.

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Ordering Information - R-8432 Molex Automatic Tube Magazine Unloading System

CHANGE PARTS KIT						ASSEMBLIES — BASE UNIT & CHANGE PARTS KIT			
Connector Eng. No.	Ckt. Size	Kit Eng. No.	Kit Order No.	Mag. Cap.* Min.	Mag. Cap.* Max.	110VAC 50/60HZ Eng. No.	110VAC 50/60HZ Order No.	220VAC 50/60HZ Eng. No.	220VAC 50/60HZ Order No.
70373	2-25	R8432-230	11-31-8810	1520	180	R8432-251	11-20-1034	R8432-272	11-20-1066
70374	2-25	R8432-231	11-31-8811	1520	180	R8432-252	11-20-1045	R8432-273	11-20-1067
70389	2-25	R8432-132	11-31-6289	940	180	R8432-131	11-20-0936	R8432-274	11-20-1068
70389	2-25	R8432-132	11-31-6289	940	160	R8432-131	11-20-0936	R8432-274	11-20-1068
70390	2-25	R8432-232	11-31-8812	940	160	R8432-253	11-20-1046	R8432-275	11-20-1069
70375	2-25	R8432-233	11-31-8813	1520	180	R8432-254	11-20-1047	R8432-276	11-20-1070
70376	2-25	R8432-234	11-31-8814	1520	180	R8432-255	11-20-1048	R8432-277	11-20-1071
70391	2-25	R8432-2	11-31-2260	1420	180	R8432-8	11-31-2266	R8432-278	11-20-1072
70392	2-25	R8432-235	11-31-8815	1420	180	R8432-256	11-20-1049	R8432-279	11-20-1073
70379	4-25	R8432-236	11-31-8816	840	180	R8432-257	11-20-1050	R8432-280	11-20-1074
70380	4-25	R8432-237	11-31-8817	840	180	R8432-258	11-20-1051	R8432-281	11-20-1075
70393	4-25	R8432-5	11-31-2263	620	160	R8432-11	11-31-2269	R8432-282	11-20-1076
70394	4-25	R8432-238	11-31-8818	620	160	R8432-259	11-20-1052	R8432-283	11-20-1077

*Typical Magazine Qty. 20 Tubes

Molex Automatic Tube Magazine Unloading Systems

Ordering Information - R-8432 Molex Automatic Tube Magazine Unloading System

CHANGE PARTS KIT						ASSEMBLIES — BASE UNIT & CHANGE PARTS KIT			
Connector Eng. No.	Ckt. Size	Kit Eng. No.	Kit Order No.	Mag. Cap.* Min.	Mag. Cap.* Max.	110VAC 50/60HZ Eng. No.	110VAC 50/60HZ Order No.	220VAC 50/60HZ Eng. No.	220VAC 50/60HZ Order No.
70377	4-25	R8432-239	11-31-8819	840	180	R8432-260	11-20-1053	R8432-284	11-20-1078
70378	4-25	R8432-240	11-31-8820	840	180	R8432-261	11-20-1054	R8432-285	11-20-1079
70395	4-25	R8432-3	11-31-2261	780	160	R8432-9	11-31-2267	R8432-286	11-20-1080
70396	4-25	R8432-241	11-31-8821	780	160	R8432-262	11-20-1055	R8432-287	11-20-1081
5360	10-60	R8432-242	11-31-8822	680	140	R8432-263	11-20-1056	R8432-288	11-20-1082
8619	6-12	R8432-126	11-31-4750	500	240	R8432-125	11-20-0906	R8432-289	11-20-1083
71255	4-26	R8432-243	11-31-8823	440	220	R8432-264	11-20-1057	R8432-290	11-20-1084
70343	2-40	R8432-244	11-31-8824	2320	100	R8432-265	11-20-1058	R8432-291	11-20-1085
8624	6-80	R8432-245	11-31-8825	1580	120	R8432-266	11-20-1059	R8432-292	11-20-1086
70390	2-25	R8432-232	11-31-8812	940	160	R8432-253	11-20-1046	R8432-275	11-20-1069
71325	15	R8432-246	11-31-8826	380	—	R8432-267	11-20-1060	R8432-293	11-20-1087
71395	6-80	R8432-247	11-31-8827	1580	120	R8432-268	11-20-1061	R8432-294	11-20-1088
4455-CC	2-25	R8432-30	11-31-8828	1200	180	R8432-129	11-20-0933	R8432-295	11-20-1089
7478	2-28	R8432-248	11-31-8829	2560	160	R8432-269	11-20-1062	R8432-296	11-20-1090
7832	2-28	R8432-249	11-31-8830	2560	160	R8432-270	11-20-1063	R8432-297	11-20-1091
6373	2-28	R8432-128	11-31-4763	2560	160	R8432-127	11-20-0907	R8432-298	11-20-1092
52011	2-12	R8432-137-35	11-31-9401	1500	400	R8432-137	11-20-0948	R8432-299	11-20-1093
70229	6-72	R8432-152	11-31-7716	1820	120	R8432-153	11-20-1064	R8432-300	11-20-1094
70227	6-72	R8432-117	11-31-3708	820	120	R8432-116	11-20-0893	R8432-301	11-20-1095
4455-AC	4-28	R8432-250	11-31-8831	1200	160	R8432-271	11-20-1065	R8432-302	11-20-1096
41396	2-28	R8432-323	11-20-9647	2560	160	R8432-332	11-20-1127	R8432-341	11-20-1136
70287	4-80	R8432-324	11-31-9648	2440	120	R8432-333	11-20-1128	R8432-342	11-20-1137
41461	2-16	R8432-325	11-31-9649	2560	320	R8432-334	11-20-1129	R8432-343	11-20-1138
41548	2-28	R8432-326	11-31-9650	2560	160	R8432-335	11-20-1130	R8432-344	11-20-1139
71308	4-80	R8432-327	11-31-9651	2440	120	R8432-336	11-20-1131	R8432-345	11-20-1140
42080	2-28	R8432-328	11-31-9652	2560	160	R8432-337	11-20-1132	R8432-346	11-20-1141
42135	2-28	R8432-350	11-31-9656	2560	160	R8432-351	11-20-1146	R8432-352	11-20-1145
42189	2-28	R8432-329	11-31-9653	2560	160	R8432-338	11-20-1133	R8432-347	11-20-1142
41894	14-20	R8432-330	11-31-9654	340	240	R8432-339	11-20-1134	R8432-348	11-20-1143
42102	5	R8432-331	11-31-9655	560	—	R8432-340	11-20-1135	R8432-349	11-20-1144

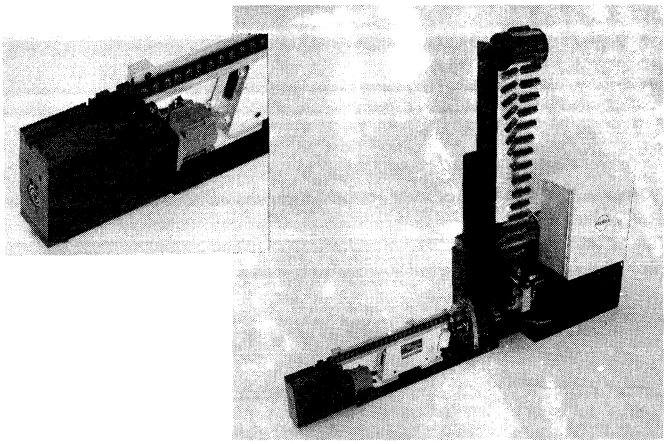
*Typical Magazine Qty. 20 Tubes

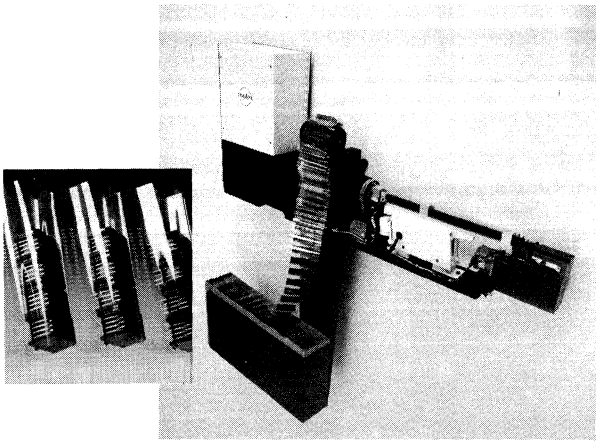
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Application Note:
If the application requires products not listed in the table above, the factory must be consulted to determine if the connector is available in tubes. Also, a tool change kit may need to be developed for the proposed application. Tool kits can be developed within a 10 week lead time.

Robotic Delivery System

Molex Automatic Welded Film Pack Unloading System





The Molex Welded Film Unloader was developed to fill the need for a low cost method of delivering a large number of components to industrial robots. Welded Film Pack packages connectors between two films of mylar which are bonded between parts to form containments. Parts are held in the containments by film tension and ejected by the delivery system. The standard film width is 4" and each containment is filled with as many parts as it will hold. A standard Ammo Pack will typically hold a minimum of 800 parts but can hold up to 4000 parts (depending on circuit size). The delivery system will automatically remove parts from the package and position them by the leads, (or pegs on SMT versions) awaiting pickup by a robot or placement machine.

After unloading, the connectors are gently vibrated to a precision positioning end block. They are then positioned by the leads and escaped forward to provide robotic pickup on all four sides of the connector.

- **Quality** — The welded film offers good protection in an easy-to-handle package.
- **Compact** — 6-1/2" wide unit makes efficient use of a robot's limited work envelope (Note: for table top feeding the unit is 10-1/2" wide).
- **Automatic** — PLC controlled for continuous operation. Full communication capabilities with most robot I/O ports.
- **Flexibility** — Can be adapted to most Molex connector styles with a simple change part kit.
- **Accuracy** — Parts are precisely located and escaped forward for pick up on all four sides.
- **Packaging Location** — There are two versions available. The Ammo Pack can be located above the table top or beneath the unit.
- **Productivity** — The unit is capable of a large volume of parts and can deliver them on a 2 second cycle.
- **Continuous** — A "low part signal" allows a new Ammo pack of parts to be loaded while the unit is running.
- **Reliability** — This unit is designed for years of operation and is backed by the standard Molex field service policy.
- **Installation** — Unit is supplied with precision mounting feet to preserve pickup location upon removal and reinstallation.
- **Loading** — The unit is loaded similar to a movie projector. A single door is opened, the film is inserted and the door is closed.
- **Adjustability** — End tooling can easily adjust to variable circuit size.

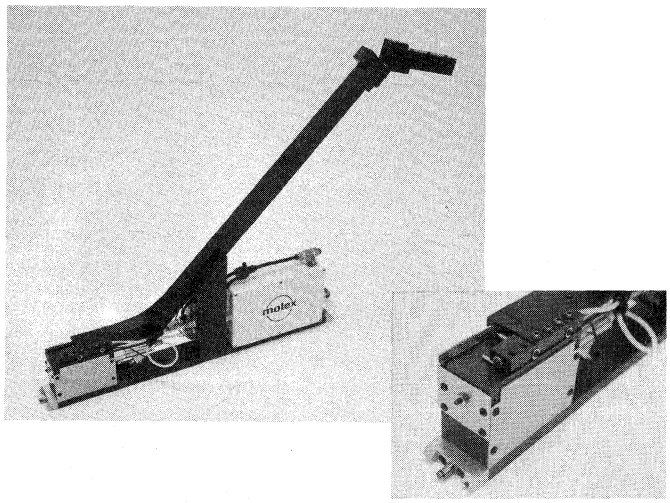
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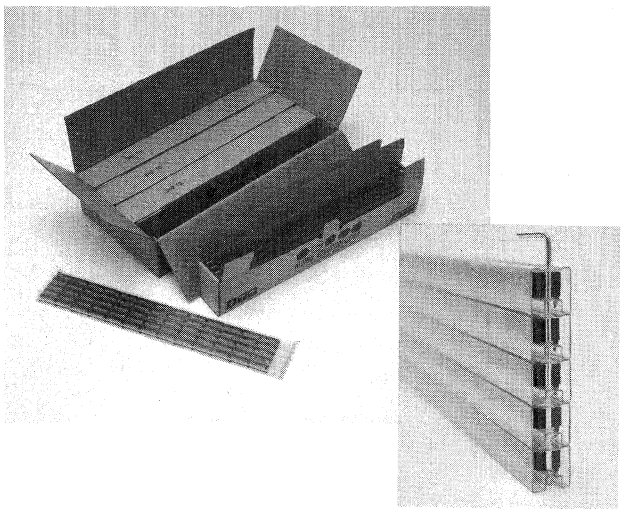
Ordering Information - AM60585 Automatic Welded Film Pack Unloading System

CHANGE PARTS KIT					ASSEMBLIES — BASE UNIT & CHANGE PARTS KIT							
					Table Top Feed 110VAC 50/60HZ		Below Table Feed 110VAC 50/60HZ		Table Top Feed 220VAC 50/60HZ		Below Table Feed 220VAC 50/60HZ	
Connector Eng. No.	Ckt. Size	Kit Order No.	Eng. No.	Package Capacity	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	Order No.
41369	4, 6, 8	11-31-8226	AM60585-32	1000	AM60585-6	11-20-0997	AM60585-5	11-20-0996	AM60585-8	11-20-0999	AM60585-7	11-20-0998
95001	4, 6, 8	11-31-8756	AM60585-34	1000	AM60585-10	11-20-1011	AM60585-9	11-20-1000	AM60585-12	11-20-1003	AM60585-11	11-20-1002
41314	4, 6, 8	11-31-8803	AM60585-35	1000	AM60585-14	11-20-1005	AM60585-13	11-20-1006	AM60585-16	11-20-1008	AM60585-15	11-20-1007
41687	4, 6, 8	11-31-8804	AM60585-36	1000	AM60585-20	11-20-1010	AM60585-19	11-20-1009	AM60585-22	11-20-1012	AM60585-21	11-20-1001

Application Note:
If the application requires products not listed in the table above, the factory must be consulted to determine if the connector is available in trays. Also, a tool change kit may need to be developed for the proposed application. Tool kits can be developed within a 10 week lead time.

Molex Single Tube Unloading System





The Molex Single Tube Delivery System will unload thru hole and SMT board mounted connectors from a tube and accurately locate them for pickup by an industrial robot. This unit was developed to support our customer whose volume does not warrant the tube magazine delivery system. Tubes have been a widely accepted means of packaging connectors due to their superior protection. This protection is necessary to an automated assembly process to preserve the features and lead tolerances that Molex designs into its connectors. The Molex tubes come packed in a magazine of tubes which are held in a stack by two end-closure rods. An operator simply removes one tube from the magazine, pivots down the tube receptacle, loads the tube and pivots up to supply 48" of on-line product.

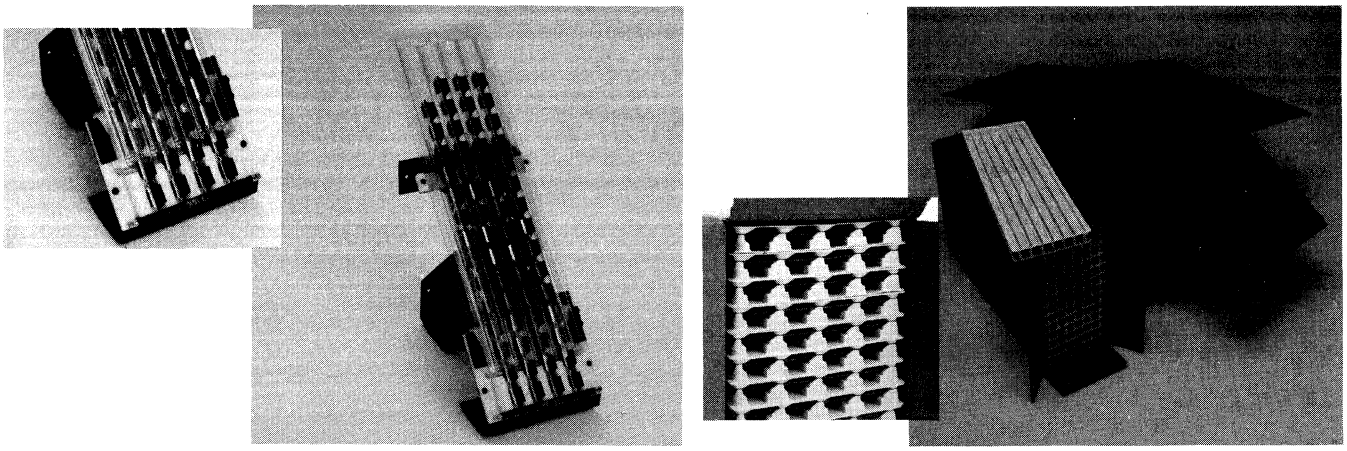
The parts are then gravity fed to a precision end block. They are then positioned by the leads and escaped forward to provide robotic pickup on all four sides of the connector.

- **Quality** — Tubes offer superior protection in an easy-to-handle magazine.
- **Compact** — 2-1/2" width makes efficient use of a robot's limited work envelope.
- **Automatic** — Self-contained controls for continuous operation. Full communication capabilities with most robot I/O ports.
- **Adjustability** — End tooling can easily adjust to variable circuit size.
- **Accuracy** — Parts are precisely located and escaped forward for pickup on all four sides. This end positioner is the same as on the tube magazine unloader.
- **Affordability** — Allows a customer to automate with lower volume levels. As volume increases a customer can upgrade to the automatic tube magazine unloader without changes in space or communication requirements.
- **Productivity** — This unit will supply connectors on a 2-second cycle and contains a buffer of parts. The viewing window allows a new tube to be loaded without breaking continuity.
- **Reliability** — This unit is designed for years of operation and is backed by an attractive field service policy.
- **Mountability** — Unit is supplied with precision mounting feet to preserve pickup location upon removal and reinstallation.

Contact Factory for Ordering Information

Manual Assembly Delivery Systems

Molex Manual Single Tray Unloading System



The Molex Manual Single Tray Unloader delivers thru hole or SMT board mounted connectors for manual pickup by an operator. The tray concept was developed as a cost effective alternative to tubes without sacrificing the superior protection. This unloader allows an operator to unload, pick and place oriented components without damaging their leads.

An operator simply places a tray in the unit, pulls the end closure straw from the tray and allows the connectors to fall into a pickup track. The components are present, properly positioned for manual pickup.

- **Productivity** — Increases operator productivity over picking and orienting loose parts from topless tray. This unit presents connectors in the same orientation (connector leads down) as their placement position.
- **Quality** — Molex trays offer superior protection in an easy-to-handle package.
- **Adjustability** — Can be adjusted to 3 different pick heights at 5 different angles.
- **Flexibility** — Can be adjusted for any circuit size in a connector type.
- **Mountability** — Adaptable for table top, wall mounting or can hang on most commercial assembly conveyor systems.
- **Automation** — The tray pack can be further automated using Molex Carton Matrix Unit #AM60586 for use in robotic component placement systems.

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Ordering Information - AM-60083 Manual Assembly Delivery Systems

Connector Eng. No.	Ckt. Size	Tray Quantities		Eng. No.	Order No.
		Min. Ckt.	Max. Ckt.		
78816	60	20	—	AM60083-13	11-31-8699
78824	60	20	—	AM60083-15	11-20-1098
78830	30	40	—	AM60083-16	11-20-1099
71355	4-16	68	44	AM60083-2	11-31-8628
71006	20-134	84	12	AM60083-17	11-20-1100
6777	12-142	72	12	AM60083-17	11-20-1100
70227	6-72	192	24	AM60083-18	11-20-1102
70229	6-72	192	24	AM60083-19	11-20-1101
71003	20-100	84	18	AM60083-17	11-20-1100
95009	4-8	144	108	AM60083-21	11-20-1123

Application Note:
If the application requires products not listed in the table above, the factory must be consulted to determine if the connector is available in trays.

Pinsetting Equipment

Single PinSetter®

- Sets up to 3,600 pins per hour into PC boards
- Accommodates .020" 0,51 mm through .045" 1,14 mm square or round wire pins with simple changeover
- Reliable pin feed
- Meets OSHA requirements
- Optional X-Y table

Specifications

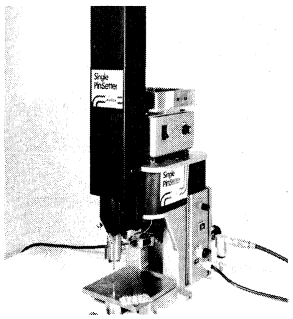
Height: 32" 81 cm

Width: 12" 30 cm

Depth: 18" 46 cm

Air - 80 psi 15 cfm (5,4 ATM @ 0,4 CMM)

Electrical: 110 VAC 5 amps 60 Hertz and 220 VAC 3 amps 50 Hertz



Multi-Directional X-Y Table Accessory for Single PinSetter®

- Designed to increase productivity
- Minimizes operator fatigue
- Bench mountable
- No air or electric required for slide
- Maintains pin orientation

Specifications

Max. Board Size - 23" x 10½" 58 cm x 26,7 cm

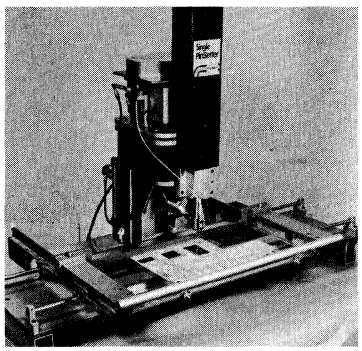
Max. Board Area that can be Pinned - 10" x 15" 25,4 cm x 38 cm

Min. Distance Board Edge to Pin Location - 3/8" 9,5 mm

Board Thickness - .062" 1,57 mm non-standard thickness available on request

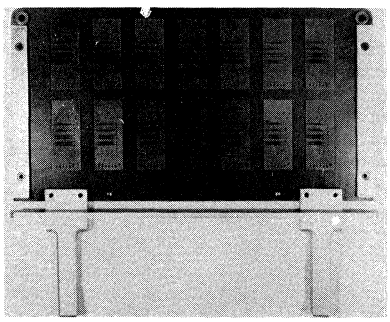
Slide Weight - 70 lbs. 31,5 kg

Bench Area - 24" x 48" 61 cm x 122 cm

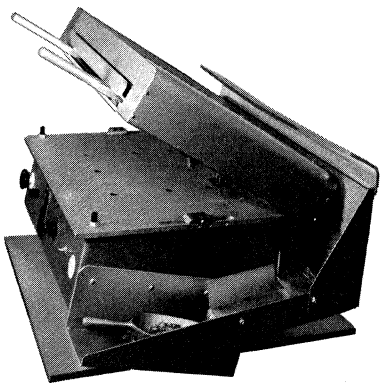


Custom Multi-PinSetter®

- Vibrator, press and template designed around your PC board pin requirements



1. Boards are loaded onto honeycomb template.



2. Template is placed in vibrator.



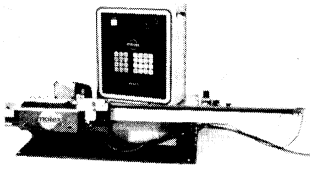
3. Vibrator is turned on and loaded (above) with pins. After a 15 - 30 second cycle 99.9% of the holes are filled. (100% fill is common.)

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C-Grid SL™ IDT Tooling

Discrete Wire Terminators, Bench Mounted

AM60510

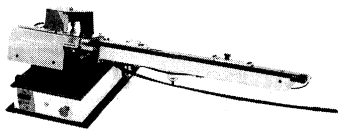


- Semi-automatic
- Connectors fed from pre-loaded tube; no manual handling
- Programmable circuit size setting
- 1,000 terminations per hour and harness assembly

Ordering Information

Eng. No.	Order No.
AM 60510	11-20-0781

AM60520

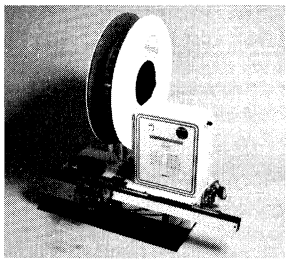


- Pneumatic, electric
- Connectors are fed from pre-loaded tube; no manual handling
- Programmable circuit size setting
- 750-900 terminations per hour

Ordering Information

Eng. No.	Order No.
AM 60520E	11-20-0949

AM 60570

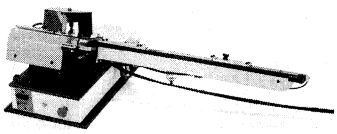


- Pneumatic, electric
- Connectors are fed from reels
- Carrier removal feature
- 1,000 terminations per hour and harness assembly

Ordering Information

Eng. No.	Order No.
AM 60570	11-20-0884

Ribbon Cable Terminators, Bench Mounted AM 60560 AM 60550

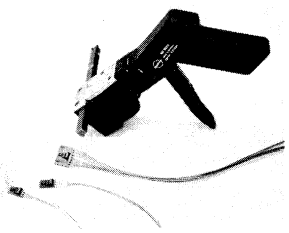


- Pneumatic
- Carrier removal feature
- 550 cycles per hour

Ordering Information

Eng. No.	Order No.	
AM 60560	11-20-0908	Tube Feed
AM 60550	11-20-0939	Reel Feed

Discrete Wire Terminator Handgun

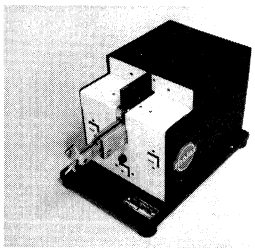


- Terminates C-Grid SL 70400 & 70475 product
- For low volume, prototype, and field repair
- Automatic indexing to next position after insertion of discrete wire
- Snaps on to standard pistol

Ordering Information

Order No.	Description	Eng. No.
11-21-5194	Pistol	AM 60114
	Module For	
11-31-7597	.100" center connectors 70400 & 70475	AM 60066

Electric Terminator For Dual Row 70451 Connectors



- Semi-automatic, electric
- Terminates Version A through F, 70451 Series
- Terminates two wires at once, and automatically seats terminals to complete assembly
- Voiding capabilities
- Up to 1,400 terminations per hour

Specifications

Electrical:
120 VAC, 60 Hz, grounded outlet

Weight:
48 lbs.

Dimensions:
10" wide, 10.5" high, 19" deep

Ordering Information

Eng. No.	Order No.
AM 60576	11-20-0917

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C-Grid SL™ IDT Tooling

AM 60000 Series
Harness Assembly Machines

- Fully automatic mass terminators for high volume applications *(minimum estimated annual usage 10 million terminations)*
- Developed from base modules for use with standard IDT and C-Grid SL connectors
- Two families of machines with advanced value-added options

Contact factory to order

Eagle Series

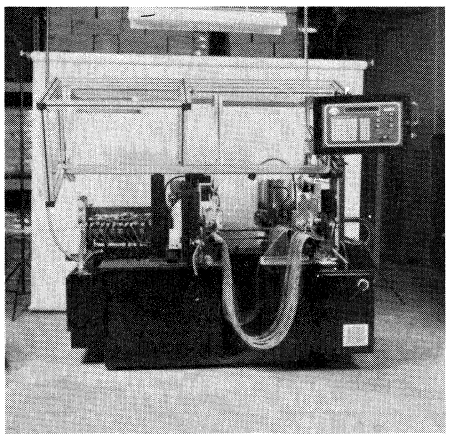


Standard Features include:

- Double or single ended harness capabilities without strip
- Single ended harness capabilities with strip
- Ribbon cable or discrete wire
- 32 circuit maximum; 2 circuit minimum
- User friendly solid state controller
- Wire lengths from 3" minimum to 24" maximum with all the wires the same length
- Cycle time: 4 to 8.5 seconds depending on wire length
- Modular design
- Self diagnostic
- Sturdy machine tool type construction
- Large variety of options

Contact factory to order

Phoenix Series



Standard Features include:

- Double or single ended harness capabilities without strip
- Single ended harness capabilities with strip
- Discrete wire or ribbon cable
- Variable or single extended wire length capability for discrete wire
- Single extended wire length capability for ribbon cable
- 32 circuit maximum; 2 circuit minimum
- User friendly solid state controller
- Wire lengths from 3" minimum to 120" maximum for single wire length & variable wire length
- Cycle time: 5.5 to 10.5 seconds depending on wire lengths
- Modular design
- Self diagnostic
- Sturdy machine tool type construction
- Large variety of options

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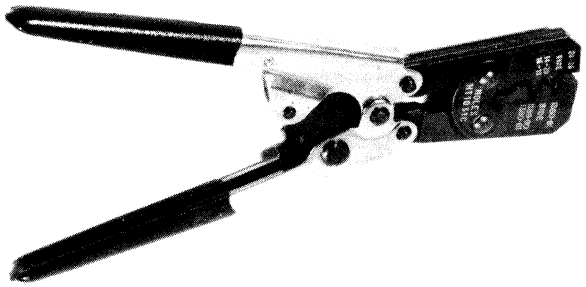
Optional Features Eagle and Phoenix Series

- Continuity testing for single or double ended assemblies
- Housing load
  - Magazine style for bulk packaging
  - Single detuber for extruded tube packaging
  - Manual track for operator loading
  - Film dereeler for mylar reel packaging
  - Vibratory or centrifugal bowl feeding for continuous loading
  - Tape dereeler for continuous tape packaging
- Product marking:
  - Hot stamp method
  - Ink pad printing method
  - Automatic labeling
- Wire dereeler systems:
  - Up to 32 barrels capacity
  - Up to 32 (12") reels capacity
- Missing wire detection
- Wire splice detection
- Single or multiple notching for ribbon cable applications
- Strip and retain for discrete wire and cable
- Data storage for recall on 5 1/4" floppy disk media through a personal computer
- Variable wire length capability - 3" minimum to 36" maximum (Eagle Series)

C-Grid SL™ Crimp Tooling

HTR Series Hand Crimper

- Crimps male and female terminals 70021 and 70058
- For low volume, prototype and repair
- Ratchet hand crimpers will not open until crimp action is completed
- Adjustable eccentric allows for various insulation diameters
- Includes wire stop and terminal locator as an interconnection aid

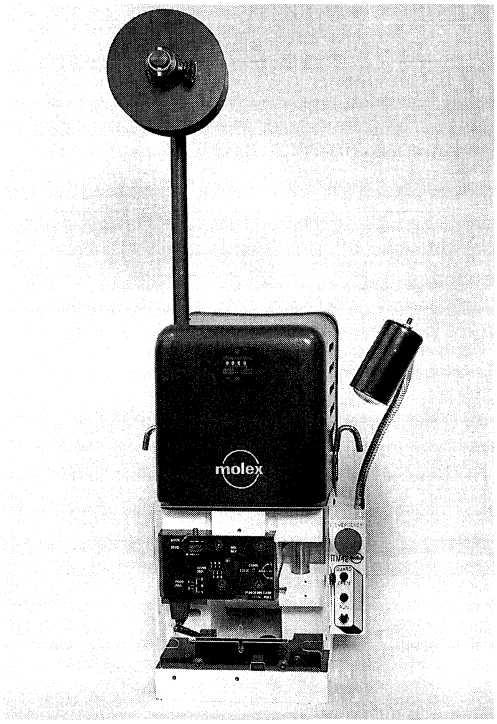


Ordering Information

Eng. No.	Slot	AWG	Order No.
HTR8519A	A B	32-36 24-30	11-01-0107
HTR8519B	A B	22-24 24-30	11-01-0118

TM 40/42™ Crimp Terminating Machines

- For medium- to high-volume needs
- May be adapted to the Komax® and Artos® wire processing units for completely automatic production
- Independent conductor and insulation adjustments with a position indicator
- Quick release tooling feature for fast, simple changeover
- Universal feed adjustable for all terminals
- No ram adjustment required
- Compact, space-saving design
- Utilizes plug-in T8341/8331 terminator dies (see below)



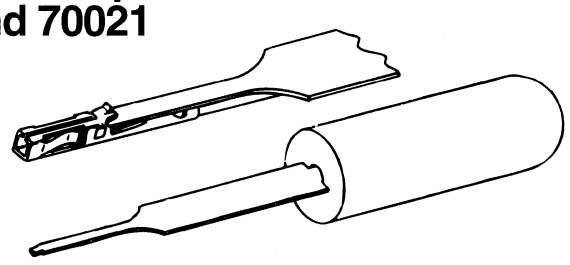
Ordering Information

TM40/42 PRESS ONLY - 110V 60 Hz		
	Order No.	Eng. No.
New:	69002-5001	TM42
Used:	11-05-0021	TM40DU

TERMINATOR DIE AND TM40/42 PRESS				
	Terminator Die Only		Domestic (110V 60 Hz)	
Terminal	Order No.	Eng. No.	Order No.	Eng. No.
MALE 70021				
(24-30 ga.)	11-40-2085	T8341A	11-04-0400	TM42D8341A
(32-36 ga.)	11-40-2086	T8341B	11-04-0402	TM42D8341B
(22-24 ga.)	11-40-2087	T8341C	11-04-0404	TM42D8341C
FEMALE 70058 and 71851				
(24-30 ga.)	11-40-2068	T8331A	11-04-0366	TM42D8331A
(32-36 ga.)	11-40-2077	T8331B	11-04-0384	TM42D8331B
(22-24 ga.)	11-40-2090	T8331C	11-04-0410	TM42D8331C

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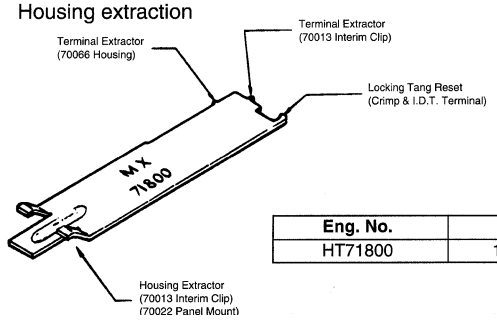
Insertion Tool
for Crimp Wire Terminals 70058 and 70021



Eng. No.	Order No.
HTA-60615	11-02-0022

Multi-Purpose Extraction Tool

- For crimp and insulation displacement terminals
- Locking tang reset
- Housing extraction



Eng. No.	Order No.
HT71800	11-03-0036

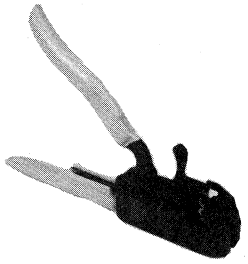
C-Grid III™ Tooling

Preferred Version in Europe

Hand Crimper
For 22-32 AWG

Molex HT-20 hand tools are used for crimping loose part terminals. Hardened steel, profiled inserts are located in a **parallel** movement frame. This series of tools have a ratchet action (to ensure crimp stroke completion) with options available for wire stops and terminal locators.

- ☐ These tools are recommended for small production, prototype, and repair work
- ☐ Insert crimp forms can be replaced in event of damage or breakage



Specifications:

Weight: 0.8 kg

Size: 300 x 64 x 25mm

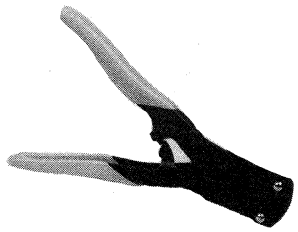
Ordering Information (Preferred Version in Europe)

For use with Terminal Eng. No. 90290	**Order No.** 69008-0026

Hand Crimper
For 22-28 AWG

Molex HT-30 hand tools are hand crimp pliers, with a **parallel** movement for crimping loose part terminals. They include a ratchet action (to ensure crimp stroke completion), with options available for wire stops and terminal locators.

- ☐ Parallel movement produces precise, high quality crimp termination
- ☐ These tools are recommended for small production, prototype, and repair work



Specifications:

Weight: 0.6 kg

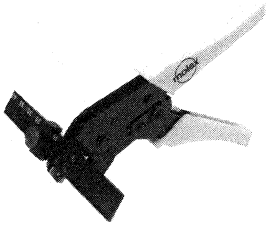
Size: 230 x 64 x 25mm

Ordering Information (Preferred Version in Europe)

For use with Terminal Eng. No. 90119	**Order No.** 69008-0005

IDT Handtool Head
For C-Grid III or HE14 Range

- ☐ Fits standard pistol (69008-0210) Page 4M
- ☐ Index, IDT, crimp in one operation
- ☐ Processes single and dual row

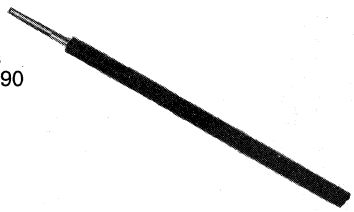


Ordering Information (Preferred Version in Europe)

Order No.	69008-0500

Terminal Insertion Aid

- ☐ Used with C-Grid III terminals Eng. Nos. 90119, 90146, 90290



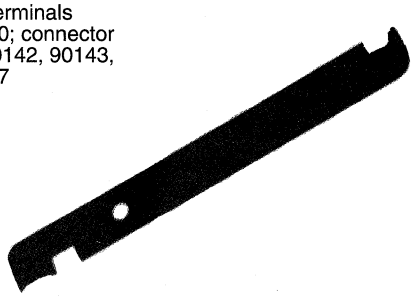
Ordering Information (Preferred Version in Europe)

Order No.	69008-0140

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Terminal Extraction Aid

- ☐ Used for C-Grid III terminals 90119, 90146, 90290; connector Eng. Nos. 90123, 90142, 90143, 90156, 90160, 90187



Ordering Information (Preferred Version in Europe)

Order No.	69008-0003

Extraction Aid

- ☐ Used with C-Grid III connectors Eng. Series 90140, 90123, 90187

Ordering Information
(Preferred Version in Europe)

Order No.	69008-0001

- ☐ Used with C-Grid III connector Eng. No. 90139

Ordering Information
(Preferred Version in Europe)

Order No.	69008-0002



Preferred Version in Europe

PB13 Pneumatic Terminator 69012-0XX0

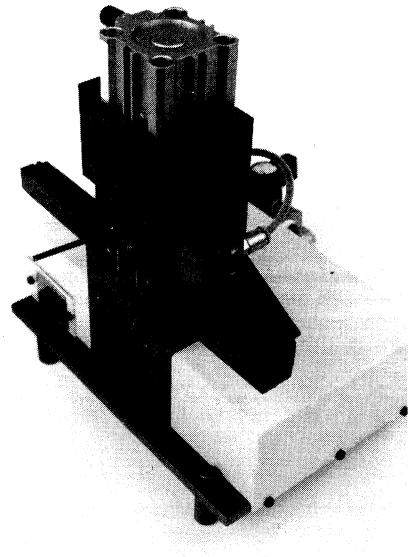
- For processing hand placed connectors, discrete wire
- Connector indexing
- Pneumatically operated cycle timer ensures stroke completion
- Leaves operator free to work with both hands
- Automatically indexes after termination

Specifications

Weight: 8-15 kg

Dimensions:
250mm W x 150mm D x 215mm H

Working Air Pressure:
6. BAR



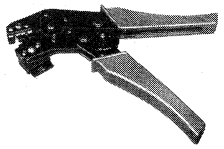
Ordering Information (Preferred Version in Europe)

Connector	Eng./Order No.	Remarks
90153, 90154, 90175	69012-0280	—
90225, 90226	69012-0320	—
90061, 90062	69012-0500	Manual stick separation
90061, 90062	69012-0550	Automatic stick separation
52051	69012-0350	—
Wezag™ head adapter	69012-0340	PB13 change kit available
7720	69012-0600	Side loader
7720	69012-0700	Hand placed connectors
90062	69012-0900	Tape feed

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D-Subminiature Connector Tooling

Hand Crimp Tools
For Loose Terminals



Ordering Information
(Preferred Version in the Americas)

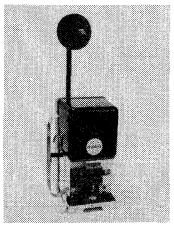
Eng. No.	Order No.
HTR 60675	11-01-0147

Ordering Information
(Preferred Version in Europe and the Far East)

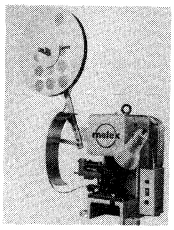
Eng. No.	Order No.
HTR 60642	11-01-0127

Semi-Automatic Crimp Machines
For 82024/82023 Series Contacts

- Terminates AWG 20-28 crimp terminals to wires for D-Subminiature connectors.



TM42 Press



M-15A Press

Ordering Information
(Preferred Version in the Americas and Europe)

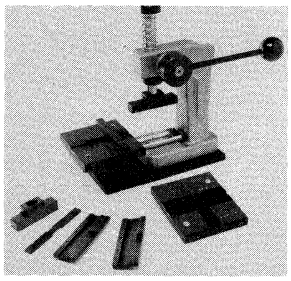
Description	Order No.		Crimp Die
	110 Volts	220 Volts	
TM42 Press	11-05-0018	69002-5000	Contact Factory

(Preferred Version in the Far East)
(Not Offered in the U.S.)

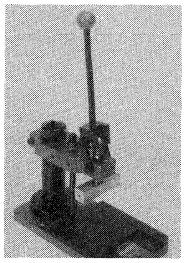
M-15A Press	11-26-0033	—	Contact Factory

DS50™ Series
Arbor Press for .050" 1,27mm Ribbon Cable Assemblies

- Quick and reliable assembly of cable and connector
- Lightweight and portable
- Interchangeable tooling compatible with competitive prices
- Low cost



AM4700-24



69020-0660

Ordering Information
(Preferred Version in the U.S.)

Description	Eng. No.	Order No.
Assembly Press	AM-4700-24	11-21-0679
Tool Change Kit — DS-50	AM-60043	11-21-9391
Universal Adapter Plate	AM-60561	11-31-2176
Cable Shear Module	AM-6800-1	11-10-0081

(Preferred Version in Europe) *(Not Offered in the U.S.)

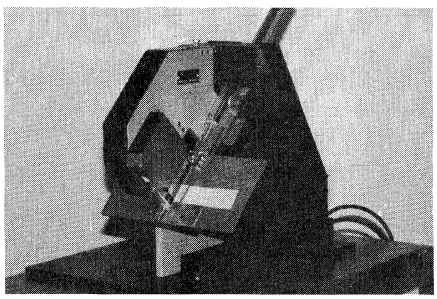
Description	Eng. No.	Order No.
* Assembly Press	69020-0660	69020-0660
Tool Change Kit — DS-50	AM-60043	11-21-9391
Universal Adapter Plate	AM-60561	11-31-2176
* Cable Shear Module	69020-0900	69020-0900

DS50 Series
Semi-Automatic Terminator

- Pneumatic only — no electrical source required
- Tube fed
- Feed-to or feed-thru from either side
- Assembles all circuit sizes
- Production rate up to 550 single-ended assemblies per hour
- Minimum cable length 1.5" 39mm

Specifications

Width - 18"
Length - 20"
Height - 18"
Weight - 60 lbs.



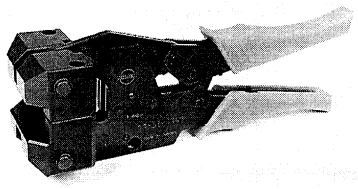
Ordering Information

Description	Eng. No.	Order No.
Base Machine only	AM-60556A1	11-20-0899
DS50 Tool Module	AM-60556F1	11-31-9001

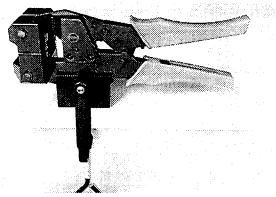
M

SEMCONN™ Application Tooling

Basic Hand Tool & Bench Clamp for Round & Flat Shielded Cable Plugs



Frame

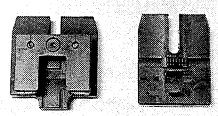


Clamp with Frame

Ordering Information

Eng. No.	Order No.	Description
AM-63146-1	11-32-4141	Frame
AM-63146-2	11-32-4142	Clamp

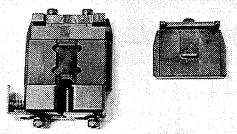
Tooling Required for Plug Termination (Flat & Round Cable)



Ordering Information

Circuit Size	Eng. No.	Order No.
4	AM-63147-4	11-32-4144
6	AM-63147-6	11-32-4145
8	AM-63147-8	11-32-4146
16	AM-63147-16	11-32-4147

Tooling Required for Plug Insert Termination (Round Cable)



Ordering Information

Circuit Size	Eng. No.	Order No.
4	AM-63148-4	11-32-4148
6	AM-63148-6	11-32-4149
8	AM-63148-8	11-32-4150
16	AM-63148-16	11-32-4151

Ferrule Crimp Dies (Round Cable)

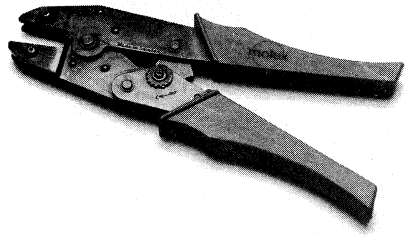


Ordering Information

Circuit Size	Eng. No.	Order No.
4	AM-63149-4	11-32-4152
6	AM-63149-6	11-32-4153
8	AM-63149-8	11-32-4154
16	AM-63148-16	11-32-4145

Ordering Information-Hand Tool

Eng. No.	Order No.
AM-60039-6	11-31-6379

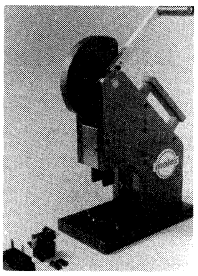


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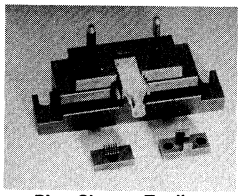
SEMCONN™ Application Tooling

Tooling Required For Plug Termination

- Modular
- Quick tooling changeovers
- Ratchet terminator assures completion of full cycle
- Lightweight, portable
- Reliable, low-cost assembly



Basic Press with Plug Terminator



Plug Change Tooling

Basic Press and Plug Terminator for Round and Flat Shielded Cable Plugs

Ordering Information

Ckt. Size	Eng. No.	Order No.[1]
4	AM60028-4	11-31-6357
6	AM60028-6	11-31-6358
8	AM60028-8	11-31-6359
16	AM60028-16	11-31-6360

[1] Order numbers are for the basic press and tooling for one circuit size.

To Change Circuit Size Order Change Tooling Only

Ckt. Size	Eng. No.	Order No.[2]
4	AM60029-4	11-31-6361
6	AM60029-6	11-31-6362
8	AM60029-8	11-31-6363
16	AM60029-16	11-31-6364

[2] Order numbers are for change tooling for the circuit size.

Tooling Required For Plug Insert Termination

Basic Press and Plug Terminator for Round Cable Plugs

Ordering Information

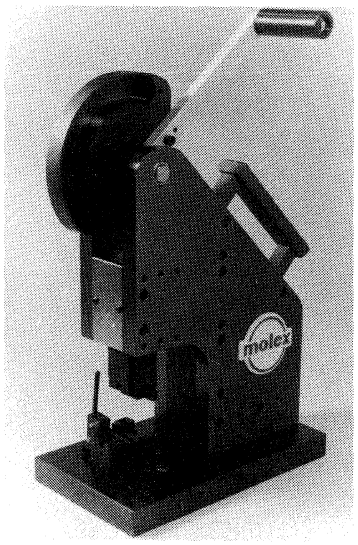
Ckt. Size	Eng. No.	Order No.[3]
4	AM60035-4	11-31-6365
6	AM60035-6	11-31-6366
8	AM60035-8	11-31-6367
16	AM60035-16	11-31-6368
6/4	AM60035-46	11-31-8633
8/6	AM60035-68	11-31-8634

[3] Order numbers are for the basic press and tooling for one circuit size.

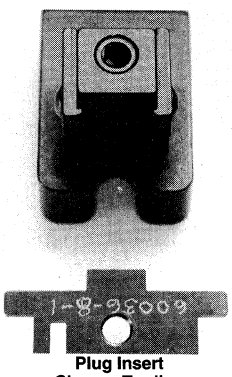
To Change Circuit Size Order Change Tooling Only

Ckt. Size	Eng. No.	Order No.[4]
4	AM60036-4	11-31-6369
6	AM60036-6	11-31-6370
8	AM60036-8	11-31-6371
16	AM60038-16	11-31-6372
6/4	AM60036-46	11-31-8630
8/6	AM60036-68	11-31-8631

[4] Order numbers are for change tooling for the circuit size.



Basic Press Unit with Plug Insert Terminator



Plug Insert Change Tooling

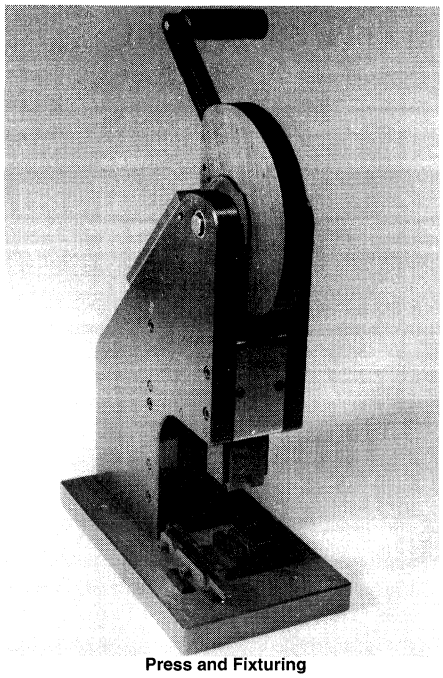
NOTE: To terminate standard round cable plugs three applicators are required:
① Plug insert termination
② Plug termination
③ Ferrule crimp

To terminate flat cable plugs only, plug termination is required.

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Tooling Required for Round Cable Ferrule Crimping Arbor Press

Arbor Press with Fixturing

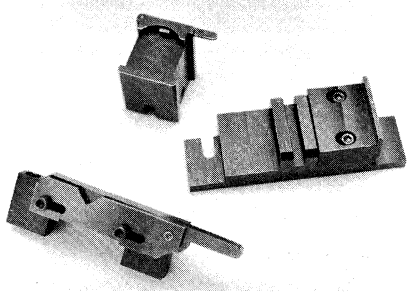


Press and Fixturing

Ordering Information - Arbor Press & Fixturing
(without crimp dies)

Eng. No.	Order No.
AM60098	11-21-9507

Fixturing

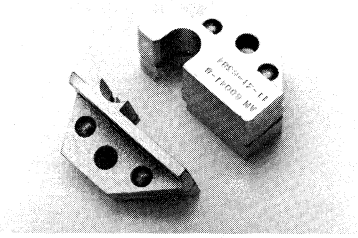


Fixturing only

Ordering Information - Fixturing only
(for changeover with plug insert tooling)

Eng. No.	Order No.
AM60063	11-31-7559

Ferrule Crimping Dies

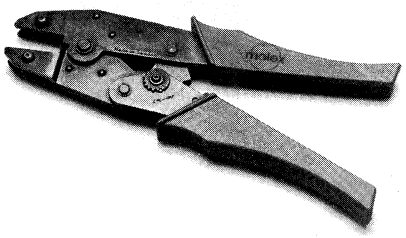


Crimping Dies

Ordering Information - Crimping Dies
(for use in Arbor Press only)

Circuit Size	Eng. No.	Order No.
4	AM60041-4	11-31-6382
6	AM60041-6	11-31-6383
8	AM60041-8	11-31-6384
16	AM60041-16	11-31-6385

Ferrule Hand Tool



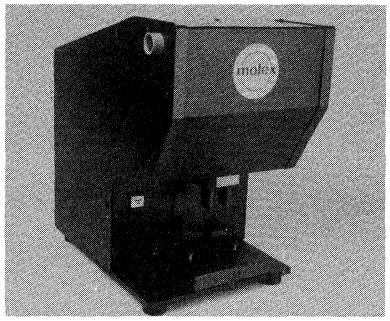
Hand Tool

Ordering Information - Hand Tool
(without crimp dies)

Eng. No.	Order No.	
AM60039-6	11-31-6379	For low volume production only

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Power Press



Ordering Information

Eng. No.	Order No.	Description
AM60078-120	11-31-9639	110V
AM60078-220	11-31-9243	220V

110V, Foot Switch-Operated Press

Plug Terminators

Circuit Size	Eng. No.	Order No.
4	AM63112-4FS	11-32-1453
6	AM63112-6FS	11-32-1454
8	AM63112-8FS	11-32-1455
16	AM63112-16FS	11-32-1456

Insert Terminators

Circuit Size	Eng. No.	Order No.
4	AM63113-4FS	11-32-1448
6	AM63113-6FS	11-32-1449
8	AM63113-8FS	11-32-1450
16	AM63113-16FS	11-32-1451
6-Load-4	AM63113-64FS	11-32-1255
8-Load-6	AM63113-86FS	11-32-1452

Ferrule Crimpers

Circuit Size	Eng. No.	Order No.
4	AM63114-4FS	11-32-1457
6	AM63114-6FS	11-32-1458
8	AM63114-8FS	11-32-1459
16	AM63114-16FS	11-32-1460

Foot Switch, 110 V Press Only

Eng. No.	Order No.
AM60078-120FS	11-32-1089

220V, Foot Switch-Operated Press

Plug Terminators

Circuit Size	Eng. No.	Order No.
4	AM63110-4FS	11-32-1445
6	AM63110-6FS	11-32-0580
8	AM63110-8FS	11-32-1446
16	AM63110-16FS	11-32-1447

Insert Terminators

Circuit Size	Eng. No.	Order No.
4	AM63109-4FS	11-32-1440
6	AM63109-6FS	11-32-1441
8	AM63109-8FS	11-32-1442
16	AM63109-16FS	11-32-1443
6-Load-4	AM63109-64FS	11-32-0579
8-Load-6	AM63109-86FS	11-32-1444

Ferrule Crimpers

Circuit Size	Eng. No.	Order No.
4	AM63111-4FS	11-32-1437
6	AM63111-6FS	11-32-0581
8	AM63111-8FS	11-32-1438
16	AM63111-16FS	11-32-1439

Foot Switch, 220 V Press Only

Eng. No.	Order No.
AM60078-220FS	11-32-1088

MX50™/QF50™ .050" 1,27 mm Ribbon Cable Tooling

Ribbon Cable Terminator Handgun



- For low volume, prototype and field repair
- Snap-on modular die for terminating .050" 1,27 mm center ribbon cable to MX 50 connectors 40312, 70121, and 71007

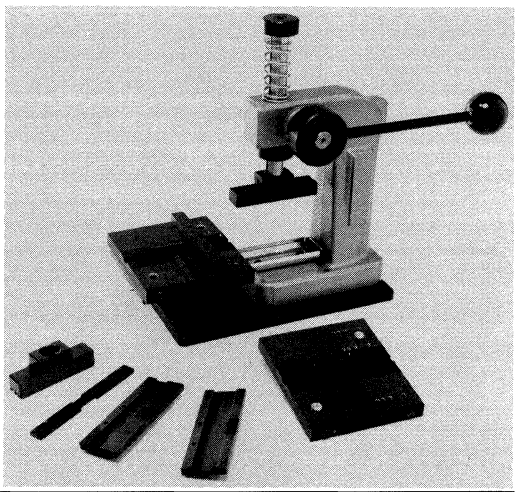
Ordering Information

Eng. No.	Description	Order No.	
AM-60114	Pistol	11-21-5194	Required for all modules and power adapter
AM-60571	Power Adapter & Table Clamp	11-31-3337	Required for all modules

Ordering Information

Eng. No.	Description	Order No.	Use with Connectors
AM-60577	Module	11-31-4652	40312, 5320
AM-60539	Module	11-31-3339	70121/71891
AM-60575	Module	11-31-3340	Cable Shear

Low Force Arbor Press and Interchangeable Tool Kits



- Lightweight, portable, reliable, low-cost assembly
- Cable shearing capabilities
- Interchangeable tooling which is compatible with most competitive presses
- Feed-to or feed-thru
- Production rate — up to 110 assemblies per hour

Specifications

Weight: 15 lbs. 6,9 kg

Bench Space: 12" x 8" 30,5cm x 20,3cm

Height: 14" 36cm

Ordering Information

Terminates Connector (Eng. No.)	Description	Tool Change Kits	
		Eng. No.	Order No.
All .050" Center Molex Connectors	Arbor Press Machine only — Eng No. AM-4700-24 Order No. •11-21-0679		
40312 Standard MX50 70121/71891 Slimline MX50	Universal Adapter Plate Assembly *	AM-60552	11-31-2181
5360 Qik Flecs	**Eng. No.** AM-60561 **Order No.** 11-31-2176	AM-60566	11-31-2187
5320 Qik-Flecs		AM-60567	11-31-2335
6874, 8173 Edge Card	Tooling Locator Plate for up to 68 circuit connector	AM-6874-1	•11-21-0678

ACCESSORIES		
Description	Eng. No.	Order No.
Cable Shear Module	AM-6800-1	•11-10-0081
Replacement Blade for Cable Shear	AM-6800-2	11-21-1102
Replacement Cutting Plate for Cable Shear	AM-6800-3	•11-21-1103

* If customer already has Universal Adapter Plate Assembly (Eng. No. AM-60561, Order No. 11-31-2176), all that is required for each above connector is the appropriate Tool Change Kit.

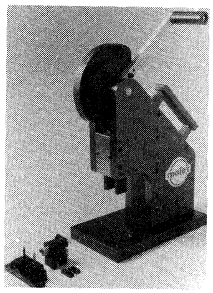
• U.S. Standard Product available through Molex Franchised Distributors

Customer Application Note: If application requires terminating the 71007, 70121, 40312 or 5320 connector above 60 circuits, the customer is advised to check the arbor press platen length. All new arbor presses are shipped with extended platens measuring 3.75 inches in length. However, if the customer already has an arbor press, it is possible the platen length is 3.25 inches. The platen is a black aluminum "T" shaped piece located at the bottom end of the arbor press ram. If the customer expects to terminate 64 circuit connectors, the extended platen (3.75 inches) may be ordered using the following numbers: Eng. No. AM-4700-32 Order No. 11-10-1055.

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MX50™/QF50™ .050" 1,27 mm Ribbon Cable Tooling

High Force Basic Arbor Press and Interchangeable Tool Kits



- Modular interchangeable tooling
- Quick tooling changeovers
- Ratchet terminator assures completion of full cycle
- Lightweight, portable

Ordering Information

Basic Manual Press and Tooling

TERMINATES CONNECTOR	Order No.	Eng. No.
71522 DL-50 Plug	11-20-1163	AM-60026A
71521 DL-50 Receptacle	11-20-1164	AM-60026B
71527, 71528, 71530 & 71531 D-Sub	11-20-1165	AM-60026C
40312 MX-50 and 70121 Slimline	11-20-1166	AM-60026D
5360 Qik-Flecs	11-20-1168	AM-60026F
5320 Qik Flecs	11-20-1169	AM-60026G
70720, 70721 DL-50	11-20-1834	AM-60026H

Press Tool Kits

– Only tool kits required if customer has basic press

TERMINATES CONNECTOR	Order No.	Eng. No.
71522 DL-50 Plug	11-21-9647	AM-60026A100
71521 DL-50 Receptacle	11-21-9648	AM-60026B100
71527, 71528, 71530 & 71531 D-Sub	11-21-9649	AM-60026C100
40312 MX-50 and 70121 Slimline	11-21-9650	AM-60026D100
5360 Qik-Flecs	11-21-9652	AM-60026F100
5320 Qik Flecs	11-21-9653	AM-60026G100
70720, 70721 DL-50	11-21-9901	AM-60026H100

Tool Change Kits

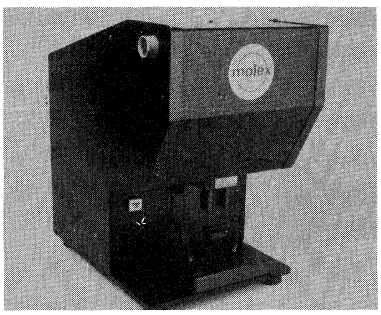
– Required to change from one product to a different product

TERMINATES CONNECTOR	Order No.	Eng. No.
71522 DL-50 Plug	11-31-5557	AM-60007
71521 DL-50 Receptacle	11-31-5555	AM-60008
71527, 71528, 71530 & 71531 D-Sub	11-21-9391	AM-60043
40312 MX-50 and 70121 Slimline	11-31-2181	AM-60552
5360 Qik-Flecs	11-31-2187	AM-60566
5320 Qik Flecs	11-31-2335	AM-60567
70720, 70721 DL-50	11-21-9746	AM-63125

Accessories

Order No.	Description	Eng. No.
11-31-6356	Basic Manual Press	AM-60026
11-20-0947	Ribbon Cable Tooling Adapter	AM-60042
11-20-1170	Basic Press with Tooling Adapter	AM-60026Z
11-31-2176	Universal Adapter Plate	AM-60561

Electric Press and Interchangeable Tool Kits



- Modular interchangeable tooling
- Quick tooling changeovers
- Prevents operator fatigue

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Ordering Information

Electric Press and Tooling

TERMINATES CONNECTOR	Order No.	Eng. No.
71522 DL-50 Plug	11-20-1156	AM-60078A120
71521 DL-50 Receptacle	11-20-1157	AM-60078B120
71527, 71528, 71530 & 71531 D-Sub	11-20-1158	AM-60078C120
40312 MX-50 and 70121 Slimline	11-20-1159	AM-60078D120
5360 Qik-Flecs	11-20-1161	AM-60078F120
5320 Qik Flecs	11-20-1162	AM-60078G120

Press Tool Kits

– Only tool kits required if customer has basic press

TERMINATES CONNECTOR	Order No.	Eng. No.
71522 DL-50 Plug	11-21-9647	AM-60026A100
71521 DL-50 Receptacle	11-21-9648	AM-60026B100
71527, 71528, 71530 & 71531 D-Sub	11-21-9649	AM-60026C100
40312 MX-50 and 70121 Slimline	11-21-9650	AM-60026D100
5360 Qik-Flecs	11-21-9652	AM-60026F100
5320 Qik Flecs	11-21-9653	AM-60026G100

Tool Change Kits

– Required to change from one product to a different product

TERMINATES CONNECTOR	Order No.	Eng. No.
71522 DL-50 Plug	11-31-5557	AM-60007
71521 DL-50 Receptacle	11-31-5555	AM-60008
71527, 71528, 71530 & 71531 D-Sub	11-21-9391	AM-60043
40312 MX-50 and 70121 Slimline	11-31-2181	AM-60552
5360 Qik-Flecs	11-31-2187	AM-60566
5320 Qik Flecs	11-31-2335	AM-60567

Accessories

Order No.	Description	Eng. No.
11-31-9369	Electric Press (120 volt)	AM-60078-120
11-20-0947	Ribbon Cable Tooling Adapter	AM-60042
11-20-1171	Basic Press with Tooling Adapter	AM-60078BZ
11-31-2176	Universal Adapter Plate	AM-60561
11-31-9243	Electric Press (220 volt)	AM-60078-220

MX50™/QF50™ .050" 1,27 mm Ribbon Cable Tooling

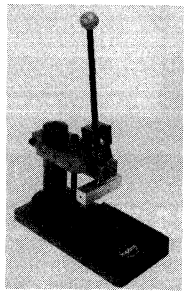
Not Available in the U.S.

Modular Euro Arbor Press

The versatile arbor press with additional heads and plates affords a complete modular system of assembly of ribbon cable and IDT connectors for any center size. Comes with packing case.

Specifications

Weight: Bench-17.2 lbs. 7,80kg
Space: 6" x 12" 153 x 305mm
Height: 18" 457mm



Ordering Information

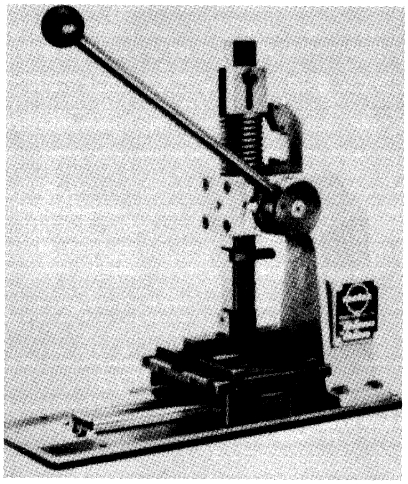
Arbor Press Modular System (Preferred version in Europe)

Description	Order No.	For Use With
Manual Arbor Press	69020-0660	All equipment listed below
CABLE PREPARATION		
Cable Shear Module	69020-0900	To shear ribbon cable of all sizes
TERMINATION TOOLING		
Assembly Module	69020-0680	Connectors 5320, 5321, 5323, 47000, 7789 & 40312
Assembly Module	69020-0710	Connectors 5350, 5360, 5370 & 5380 QF 50
Assembly Module	69020-0200	Connectors 90061, 90062
Assembly Module	69020-0001	Connectors 6874 Series

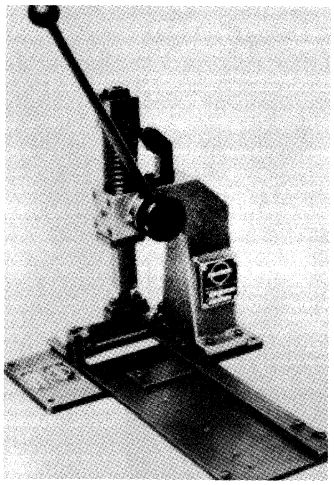
Not Available in the U.S.

J 5930 Series Press and Cutter

- ☐ Manually operated, ratchet type
- ☐ QF50



Press



Cutter

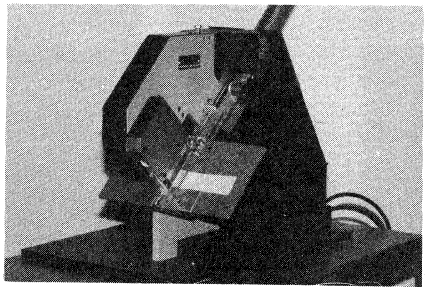
Ordering Information (Preferred Version in the Far East)

	Description	Order No.	Eng. No.
Press	Press Frame	11-26-0075	J 5930
	Base Assembly	11-26-0081	J 5936
	Kit QF Female (for 5320)	11-26-0082	J 5937
	Kit QF .100" (2,54mm) Grid (5360)	11-26-0083	J 5938
Cutter	Press Frame	11-26-0075	J 5930
	Cutter	11-26-0078	J 5933

M

MX50™/QF50™ .050" 1,27 mm Ribbon Cable Tooling

Semi-Automatic Terminator



- ☐ Pneumatic only — no electrical source required
- ☐ Tube fed
- ☐ Feed-to or feed-thru from either side
- ☐ Assembles all circuit sizes
- ☐ Production rate up to 550 single-ended assemblies per hour
- ☐ Minimum cable length 1.5" 39mm
- ☐ Inexpensive drop in tool modules for the 71007 Edge Card; 70121 Slimline, 40312 MX50 and 5360 Transition connectors

Specifications

Width: 18"
Length: 20"
Height: 18"
Weight: 60 lbs.

Ordering Information

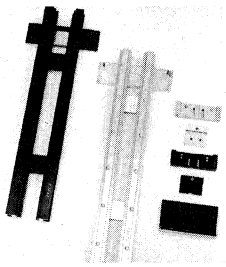
Connector	Description	Eng. No.	Order No.
Requires Tool Module	Base Machine Only	AM-60556A1	11-20-0899
70121/71891 MX 50 Slimline	Slimline Connector Tool Module	AM-60556D1	11-31-4236
40312 Standard MX 50	MX 50 Connector Tool Module	AM-60556C1	11-31-4361
5360 Transition Connector	Transition Connector Tool Module	AM-60556E1	11-31-7695
5320 QF50 Connector	International .050" Connector	AM-60556H1	11-21-9521

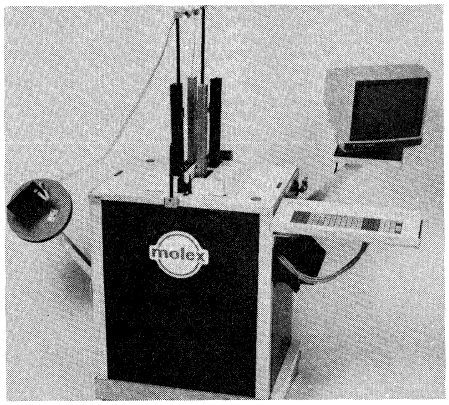
Ordering Information - Base Machine and Tool Module Assembly

Connector	Description	Eng. No.	Order No.
40312 Standard MX 50	Conbined Base Machine and Tool Module	AM60556AC1	11-20-0985
70121/71891 MX50 Slimline		AM60556AD1	11-20-0974
5360 Transition Connector		AM60556AE1	11-20-0975
5320 QF50 Connector		AM60556AH1	11-20-1215

AM63200 Series Harness Assembly Machine

- ☐ Fully automatic mass terminator for high volume applications





Osprey Series

- ☐ Single end style - minimum length 1" 25,4mm
- ☐ Double end style - minimum length 0.7" 18mm between connectors
- ☐ Daisy chain style
  - Umlimited number of connectors and cable length
  - Two connector types and up to two orientations per harness set-up
- ☐ 50 circuit maximum, 10 circuit minimum
- ☐ Accommodates #26 and #28 AWG cable
- ☐ Tests for electrical shorts
- ☐ Typical rate: 630 per hour; 12" 305mm double end harness
- ☐ Programmable: 80 key membrane pad and 9" 230mm CRT
- ☐ Self diagnostic

Specifications

Weight: 210 lbs. 95 kg
Electrical: 115V, 60 Hz 220V, 50 Hz
Pneumatics: 110 psi, 6.5 CFM, 7 Bar, 14.2 L/min.
Floor Space: 5.5' x 2.7' 1.7 x 0.8 m

Ordering Information

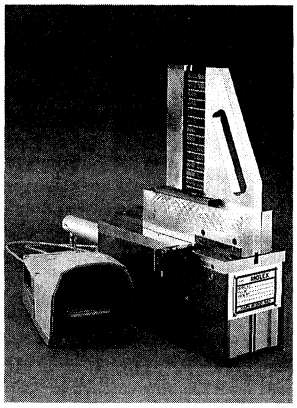
Use with the Following Connectors	Description	Eng. No.	Order No.
	Base Machine	AM 63200	11-20-1105
40312 Standard MX50	Tool Kit (One each required per station)	Consult factory for specific ordering information. (Kit designed for connector type and circuit size)	
70121/71891 Slimline MX50			
5320 Qik Flecs			
5360 Qik Flecs, Trans. Type			

M

MX50™/QF50™ .050" 1,27 mm Ribbon Cable Tooling

Not Available in the U.S.

PB15 Pneumatic Terminator



The PB15 offers a fast and efficient method to terminate hand placed pre-cut cable with 90635 QF50 connectors or 43012 MX50 connectors. An operator simply loads the magazine with the product, slides the ribbon cable into position and operates the foot-pedal. Termination and connector re-loading then takes place.

- ☐ Totally pneumatic
- ☐ Automatic connector re-loading
- ☐ Magazine feed with connector orientation
- ☐ Timer to ensure complete termination
- ☐ Cable guide
- ☐ Quick adjustments between circuit sizes
- ☐ Foot pedal operation
- ☐ Automatic tape feed available

Specifications:

Pneumatic pressure: 6 bar
Air consumption: 14 liters/min.
Weight: 28 kg

Ordering Information

Order No.	
PB15 magazine	69127-1050
PB15 tape	69127-1100

M

Picoflex .050" 1,27 mm Ribbon Cable Tooling

Picoflex Hand Tool



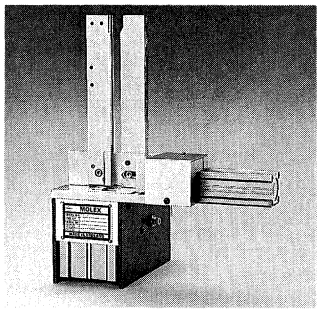
This hand tool offers a high quality method of termination for prototype/low volume production. Parallel action handtool with precision location nest and termination blades.

- Terminates Molex Picoflex product 90327 Series (4 - 26 circuits)
- Can terminate feed to or feed through applications

Ordering Information

Order No.	69008-0700

PB14 Pneumatic Terminator



An operator loads the magazine with the Picoflex product and slides the ribbon cable into the connector. Once the ribbon cable is fully inserted, it automatically triggers the termination sequence, which besides terminating that connector, also introduces the next one into position.

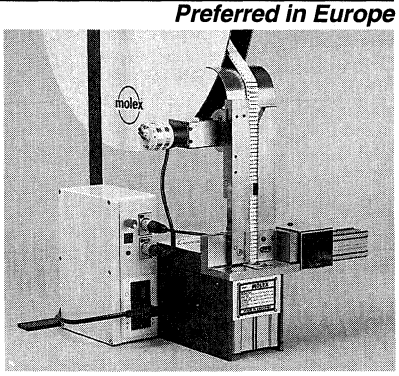
- For Picoflex 90327 connector, 4-26 circuits
- Fully pneumatic
- Cable triggers termination
- Production rate, 520 per hour
- Magazine feed
- Cable guidance
- Quick adjustment for different circuit sizes

Ordering Information

Order No.	69127-1001

Preferred in Europe

PB14T Tape Feed Terminator



The automatic tape feed adds a very cost effective option to increase the production capabilities of the PB14 terminator. The connectors are placed on the reel holder and fed into the magazine and the tape is fixed onto the motor shaft. A sensor automatically keeps the magazine track full of connectors allowing the operator to concentrate on production.

- For Picoflex 90327 connector (4-26 circuits)
- Automatic tape feed
- Cable entry triggers termination
- Quick adjustment between circuit sizes
- Hand or bowl feed versions also available
- Production rate 2160 connectors per hour

Ordering Information

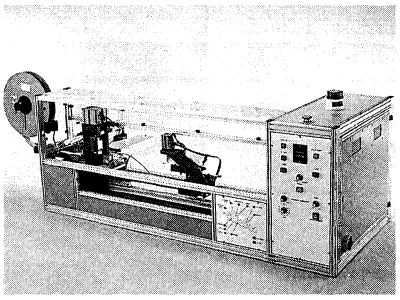
Order No.	
220 V	69127-1004
110 V	69127-1024

M

Picoflex .050" 1,27 mm Ribbon Cable Tooling

Picoflex Desk Top (PDT) Machine

Preferred in Europe



This harness making machine has been developed in order to provide the medium volume Picoflex customer with a fully automatic means of termination, while keeping the capital investment to a minimum. The machine is pneumatically actuated and PLC controlled. A built in "continuity test" facility ensures that each harness produced is of the highest quality.

- For Picoflex 90327 (supplied on tape) and 90584 (supplied in tubes)
- Continuity test
- Wire straightener
- PLC control
- Harness collection tray
- Production rate, 360 harnesses per hour

Specifications

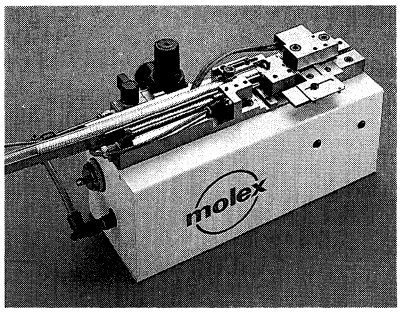
Electric: 240V, 50Hz, single phase
Pneumatic Pressure: 6 bar
Air consumption: 6 litres/min.
Weight: 140 kg

Ordering Information

Order No.	Contact factory to order

PB16 Pneumatic Terminator

Preferred in Europe



The PB16 offers a fast and efficient method to terminate hand placed pre-cut cable with Molex 90584 Series Picoflex board in connectors. An operator simply loads the pre-tubed product, slides the ribbon cable into position to trigger the machine. Termination and connector re-loading then takes place.

- For Picoflex 90584
- Fully pneumatic
- Automatic connector re-loading
- Tube feed with connector orientation
- Timer to ensure complete termination
- Cable entry triggers termination

Ordering Information

Order No.	69127-1010

M

90075 Phone Plug Tooling Hand Tool

4, 6 and 8 Position

- For low volume, prototype and repair
- Includes a stripper blade
- Die sets can be changed to accommodate different circuit sizes
- Ratchet will not open until crimp action is completed



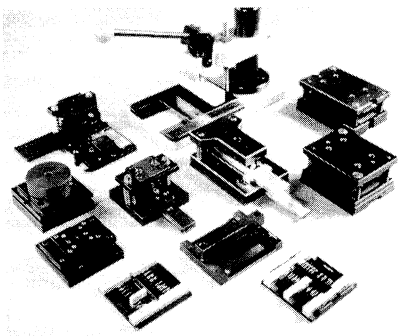
Ordering Information

DESCRIPTION OF PLUG TYPE		PLUG SIZE AND NO. CONTACTS	HAND TERMINATOR ORDER NO.
Plug	4, 6, 8, Cores		
90075-0003	W.E. Plug, N.K.	4/4	69008-1120
90075-0027	W.E. Plug, N.K.	4/4	69008-1120
90075-0011	W.E. Plug, N.K.	6/4	69008-1121
90075-0035	W.E. Plug, Key	6/4	69008-1121
90075-0012	W.E. Plug, Key	6/4	69008-1121
90075-0036	W.E. Plug, Key	6/4	69008-1121
90075-0007	W.E. Plug, N.K.	6/6	69008-1122
90075-0031	W.E. Plug, N.K.	6/6	69008-1122
90075-0008	W.E. Plug, Key	6/6	69008-1122
90075-0032	W.E. Plug, Key	6/6	69008-1122
90075-0136/0145	W.E. Plug, N.K.	8/6	69008-1123
90075-0132/0141	W.E. Plug, N.K.	8/8	69008-1124

This range of handtools is for the application of loose part plugs only.

Telephone Connector Tooling

Arbor Press with Dies and Fixturing



- □ Modular
- □ Quick tooling changeovers
- □ Ratchet terminator assures completion of full cycle

Ordering Information - Assembly

Circuits	Eng. No.	Order No.
4 & 6	AM63181AT4	11-20-1273
8	AM63181AT5	11-20-1274

Dies
(used in Arbor Press)

Primarily Available in Europe

Ordering Information

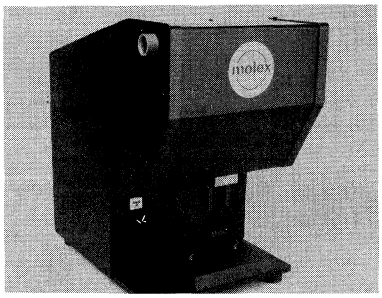
Circuits	Eng. No.	Order No.
4 & 6	ABT90817	11-28-0225
8	69020-0140	69020-0140

Accessories

Ordering Information

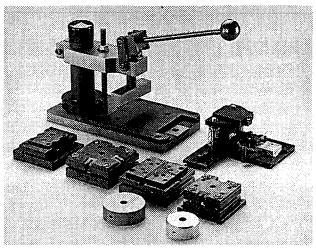
Press	Eng. No.	Order No.
Manual	AM60026	11-31-6356
Electric	AM60078-120	11-31-9639
Fixture	AM63181A1	11-21-9933

See photo, Arbor Press pg. 65M



Arbor Press and Fixtures
MB-10 Series

Base Unit Arbor Press	
Order No.	Eng. No.
69020-0660	69020-0660



M

Ordering Information

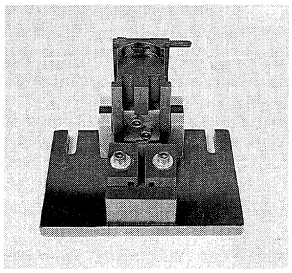
DESCRIPTION OF PLUGS AND JACKS		PLUG SIZE AND NO. OF CONTACTS	FIXTURE WITH TOOLING ORDER NO.	FIXTURE ONLY ORDER NO.	TOOL KIT ORDER NO.
90075-0003	W.E. Plug, N.K.†	4/4	69020-0500	—	—
90075-0027	W.E. Plug, N.K.†	4/4	69020-0500	—	—
90075-0011	W.E. Plug, N.K.†	6/4	69020-0500	—	—
90075-0035	W.E. Plug, Key†	6/4	69020-0500	—	—
90075-0012	W.E. Plug, Key†	6/4	69020-0500	—	—
90075-0036	W.E. Plug, Key†	6/4	69020-0500	—	—
90075-0007	W.E. Plug, N.K.†	6/6	69020-0500	—	—
90075-0031	W.E. Plug, N.K.†	6/6	69020-0500	—	—
90075-0008	W.E. Plug, Key†	6/6	69020-0500	—	—
90075-0032	W.E. Plug, Key†	6/6	69020-0500	—	—
90075-0128	W.E. Plug, N.K.†	8/6 S. Body	69020-0140	—	—
90075-0136	W.E. Plug, N.K.†	8/6 S. Body	69020-0140	—	—
90075-0145	W.E. Plug, N.K.†	8/6 S. Body	69020-0140	—	—
90075-0124	W.E. Plug, N.K.†	8/8 S. Body	69020-0140	—	—
90075-0132	W.E. Plug, N.K.†	8/8 S. Body	69020-0140	—	—
90075-0141	W.E. Plug, N.K.†	8/8 S. Body	69020-0140	—	—
90133-0001	Low Profile Jack	4/4	69020-0083	69020-0250	69020-0081
90133-0002	Low Profile Jack	6/6	69020-0084	69020-0250	69020-0082
90133-0003	Low Profile Jack	6/4	69020-0098	69020-0250	69020-0097
90133-0006	Low Profile Jack	8/6	69020-0105	69020-0250	69020-0102
90133-0007	Low Profile Jack	8/8	69020-0104	69020-0250	69020-0099

Note: All items marked † are terminated as loose parts only.

Telephone Connector Tooling

90075 Phone Plug Tooling
Terminator Dies & Assemblies (TM-40/TM-42)

- For medium to high volume needs
- Plugs are loaded from a reel and require no handling
- Quick changeover from one temrinator to another



Tooling

Ordering Information - Assembly

Circuit Size	Eng. No.	Order No.
4	**	**
6	**	**
8	TM40D6318ITI	11-04-0720

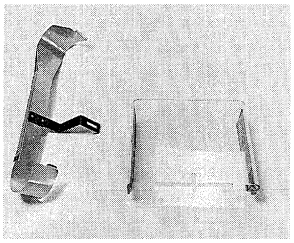
Ordering Information - Dies Only

Circuit Size	Eng. No.	Order No.
4	**	**
6	**	**
8	AM6318ITI	11-20-1259

*Accessory Kit	AM6318ITA	11-21-9964

* Only one accessory kit required for each press. (consists of modified terminal guide and press guard)

** Consult factory when ordering terminators for 90075 4 & 6 pos. plugs.



Accessory Kit

Terminator Dies
(To fit TM40/TM42 Press)

Not Available in the U.S.

Ordering Information

Euro TM42 Base Unit Order No.	69002-5000

DESCRIPTION OF PLUG TYPES		PLUG SIZE AND NO. CONTACTS	DIE WITH TOOLING		DIE PLATE ONLY		TOOL KIT ONLY	
			ORDER NO.	ENG. NO.	ORDER NO.	ENG. NO.	ORDER NO.	ENG. NO.
90075-0001	W.E. Plug, N.K.	4/4	69017-0087	69017-0087	69017-0010	69017-0010	69017-0088	69017-0088
90075-0025	W.E. Plug, N.K.	4/4	69017-0087	69017-0087	69017-0010	69017-0010	69017-0088	69017-0088
90075-0049	W.E. Plug, N.K.	4/3	69017-0087	69017-0087	69017-0010	69017-0010	69017-0088	69017-0088
90075-0053	W.E. Plug, N.K.	4/3	69017-0087	69017-0087	69017-0010	69017-0010	69017-0088	69017-0088
90075-0057	W.E. Plug, N.K.	6/2	69017-0069	69017-0069	69017-0010	69017-0010	69017-0067	69017-0067
90075-0058	W.E. Plug, Key	6/2	69017-0065	69017-0065	69017-0010	69017-0010	69017-0059	69017-0059
90075-0061	W.E. Plug, N.K.	6/3	69017-0069	69017-0069	69017-0010	69017-0010	69017-0067	69017-0067
90075-0062	W.E. Plug, Key	6/3	69017-0065	69017-0065	69017-0010	69017-0010	69017-0059	69017-0059
90075-0009	W.E. Plug, N.K.	6/4	69017-0069	69017-0069	69017-0010	69017-0010	69017-0067	69017-0067
90075-0033	W.E. Plug, N.K.	6/4	69017-0065	69017-0065	69017-0010	69017-0010	69017-0059	69017-0059
90075-0010	W.E. Plug, Key	6/4	69017-0065	69017-0065	69017-0010	69017-0010	69017-0059	69017-0059
90075-0034	W.E. Plug, Key	6/4	69017-0065	69017-0065	69017-0010	69017-0010	69017-0059	69017-0059
90075-0005	W.E. Plug, N.K.	6/6	69017-0068	69017-0068	69017-0010	69017-0010	69017-0066	69017-0066
90075-0029	W.E. Plug, N.K.	6/6	69017-0068	69017-0068	69017-0010	69017-0010	69017-0066	69017-0066
90075-0006	W.E. Plug, Key	6/6	69017-0060	69017-0060	69017-0010	69017-0010	69017-0058	69017-0058
90075-0030	W.E. Plug, Key	6/6	69017-0060	69017-0060	69017-0010	69017-0010	69017-0058	69017-0058
90075-0126	W.E. Plug, N.K.	8/6 S. Body	69017-0096	69017-0096	69017-0010	69017-0010	69017-0044	69017-0044
90075-0134	W.E. Plug, N.K.	8/6 S. Body	69017-0096	69017-0096	69017-0010	69017-0010	69017-0044	69017-0044
90075-0143	W.E. Plug, N.K.	8/6 S. Body	69017-0096	69017-0096	69017-0010	69017-0010	69017-0044	69017-0044
90075-0122	W.E. Plug, N.K.	8/8 S. Body	69017-0095	69017-0095	69017-0010	69017-0010	69017-0050	69017-0050
90075-0130	W.E. Plug, N.K.	8/8 S. Body	69017-0095	69017-0095	69017-0010	69017-0010	69017-0050	69017-0050
90075-0139	W.E. Plug, N.K.	8/8 S. Body	69017-0095	69017-0095	69017-0010	69017-0010	69017-0050	69017-0050

The above die units apply chain feed product only.

Telephone Connector Tooling

87031 Phone Plug Tooling Hand Tool

- For low volume prototype and repair
- Ratchet will not open until crimp action is completed

Ordering Information - Assembly

Circuit Size	Eng. No.	Order No.
4	AM63181HT4	11-32-4790
6/6 Only	AM63181HT5	11-32-4791
6 All Others	AM63181HT7	11-32-4795

Arbor Press with Dies & Fixturing

- Modular
- Quick tooling changeovers
- Ratchet terminator assures completion of full cycle

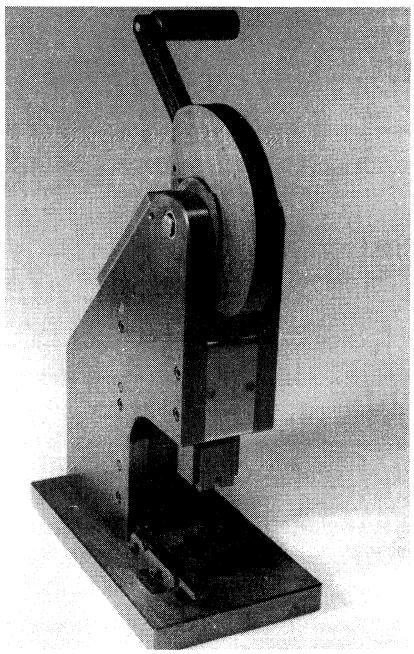
Ordering Information - Assembly

Circuit Size	Eng. No.	Order No.
4	AM63181AT1	11-20-1270
6/6 Only	AM63181AT2	11-20-1271
6 All Others	AM63181AT3	11-20-1272

Dies (Used in the Above)

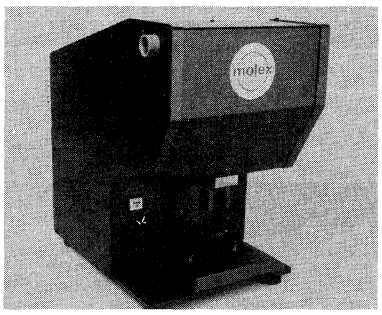
Ordering Information - Dies Only

Circuit Size	Eng. No.	Order No.
4	AM63181HT2	11-32-4767
6/6 Only	AM63181HT3	11-32-4768
6 All Others	AM63181HT6	11-32-4796



Manual Press

Arbor Press Accessories



Electric Press

Ordering Information - Dies Only

Item	Eng. No.	Order No.
Manual Press	AM60026	11-31-6356
Elect. Press	AM60078-120	11-31-9639
Press Fixt.	AM60063	11-31-7559

M

Telephone Connector Tooling

87031 Phone Plug Tooling
Terminator Dies & Assemblies (TM-42)



- For medium to high volume needs
- Plugs are loaded from a reel and require no handling
- Quick changeover from one terminator to another
- Only one accessory kit required for each press. (consists of modified terminal guide and press guard)

Ordering Information - Assembly

Circuit Size	Eng. No.	Order No.
4	TM42D63181T8	11-04-0727
6	TM42D63181T5	11-04-0724

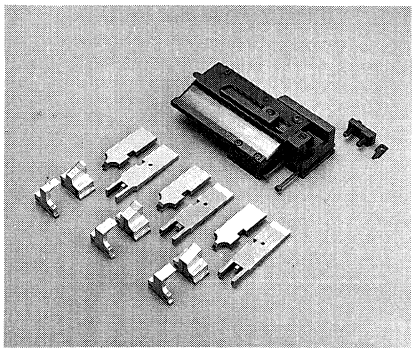
Ordering Information - Dies Only

Circuit Size	Eng. No.	Order No.
4	AM63181T8	11-20-1266
6	AM63181T5	11-20-1263

Accessories Kit	AM63181TA	11-21-9964

Not Available in the U.S.

Terminator Dies
(To fit TM40/TM42 Press)



Ordering Information

Euro TM42 Base Unit Order No.	69002-5000

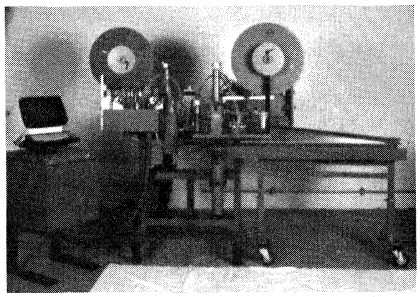
DESCRIPTION OF PLUG TYPES	PLUG SIZE AND NO. CONTACTS	DIE WITH TOOLING		DIE PLATE ONLY		TOOL KIT ONLY	
		ORDER NO.	ENG. NO.	ORDER NO.	ENG. NO.	ORDER NO.	ENG. NO.
87031	4/2	69017-0139	69017-0139	—	—	69017-0145	69017-0145
87031	4/4	69017-0138	69017-0138	—	—	69017-0146	69017-0146
87031	6/2	69017-0137	69017-0137	—	—	69017-0147	69017-0147
87031	6/3	69017-0136	69017-0136	—	—	69017-0148	69017-0148
87031	6/4	69017-0136	69017-0136	—	—	69017-0148	69017-0148
87031	6/6	69017-0135	69017-0135	—	—	69017-0149	69017-0149

The above die units apply chain feed product only.

M

Not Available in the U.S.

AM 40 Fully Automatic Harness Assembly Machine

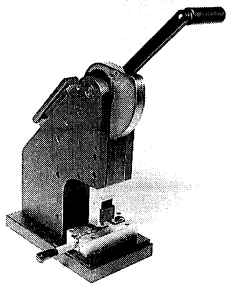


- Komax 40® machine attaches telephone plugs to one or both ends of multi-core telephone cable
- Computer-controlled with V.D.U. readout
- Simple production program entry in English, German, Italian or French. (Other languages by request)
- Cable length: 50mm min. to 100 meters max.
- Production rate: Up to 3,200 telephone cables (terminated both ends) per hour, according to length

* If customer has U.S. version TM40/42 press, it can be modified to accommodate Euro tooling.

Insulation Displacement Termination Tooling, 2.5mm Spox™ Product Series

Discrete Wire Arbor Terminator



- For prototype & low-volume requirements
- Manual index to next position after termination

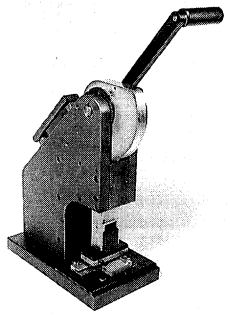
Ordering Information - Press & Tooling

Eng. No.	Order No.
AM 63172	11-20-1278

Tooling Only

Eng. No.	Order No.
AM 63172T1	11-39-0001

Flat Cable Arbor Terminator



- For prototype & low-mid volume needs
- Mass termination of prepared cable-to-connector

Ordering Information - Press & Tooling

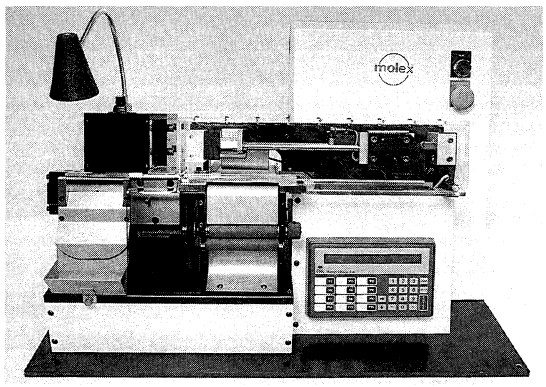
Eng. No.	Order No.
AM 60079	11-21-9757

Tooling Only

Eng. No.	Order No.
AM 60079T2	11-32-1956

Semi-Automatic "Hawk" Terminator

This modular machine assembles either discrete wire or cable to Molex I.D. connectors. The connectors are automatically processed through the machine, providing a fast, straight-forward, high quality, low cost method of assembly.



- Operator controlled device
- Connectors packaged in "Ammo-Pak" & linked together by terminal carrier strips
- Up to 1,200 cycles per hour depending on operator skill & wire/cable parameters

Ordering Information - Discrete Wire & Cable

Eng. No.	Order No.
AM 63131	11-20-1252

AM 60000 Series

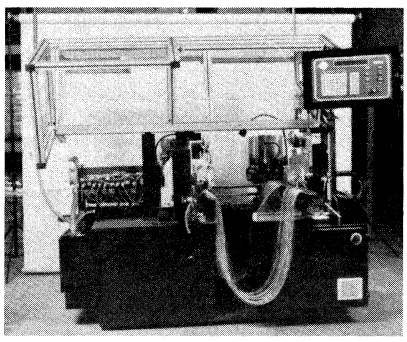
Harness Assembly Machines

- Fully automatic mass terminators for high volume applications (Minimum estimated annual usage 10 million terminations.)
- Developed from base modules for use with standard IDT and C-Grid SL connectors
- Two families of machines with advanced value-added options

Phoenix Series

Standard Features include:

- Double or single ended harness capabilities without strip
- Single ended harness capabilities with strip
- Discrete wire or ribbon cable
- Variable or single extended wire length capability for discrete wire
- Single extended wire length capability for ribbon cable
- 32 circut maximum; 2 circuit minimum
- User friendly solid state controller
- Wire lengths from 3" minimum to 120" maximum for single wire length & variable wire length (Single End) Wire lengths 6" - 24" (Double End)
- Cycle time: 6 to 11 seconds depending on wire lengths
- Modular design
- Self diagnostic
- Sturdy machine tool type construction
- Large variety of options



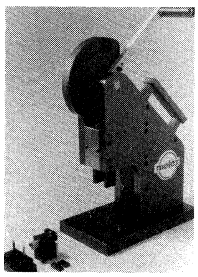
Contact Factory for Ordering Information.

M

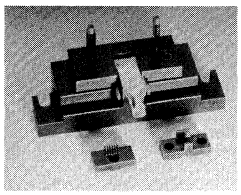
ACCESS.bus* System Application Tooling

Tooling Required for Plug Termination

Basic Press & Plug Terminator for Round & Flat Shielded Cable Plugs



Basic Press & Plug Terminator



Tool Change Kit

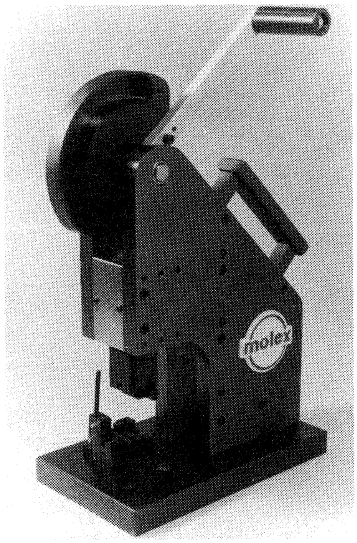
Ordering Information

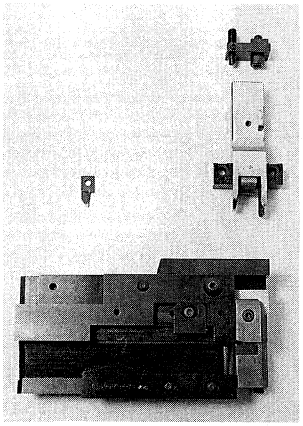
Circuit Size	Eng. No.	Order No.
4	AM 60028-4	11-31-6357

Ordering Information - Tool Change Kits

Circuit Size	Eng. No.	Order No.
4	AM 60029-4	11-31-6361

Tooling Required for Round-to-Flat Cable Ferrule Crimping





Press with Fixturing & Tooling

Ordering Information

Eng. No.	Order No.
AM 63152	11-20-1246

Fixturing & Tooling Only

Ordering Information

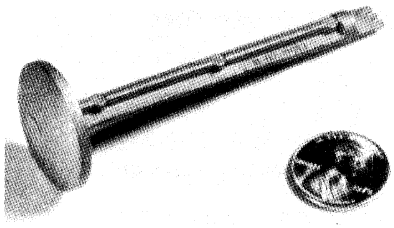
Eng. No.	Order No.
AM 63142	11-21-9921

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* ACCESS.bus is a trademark of Digital Equipment Corporation

Insulation Displacement Application Tooling for 70156/71156 Connector

"T" Handle Discrete Wire Hand Tool

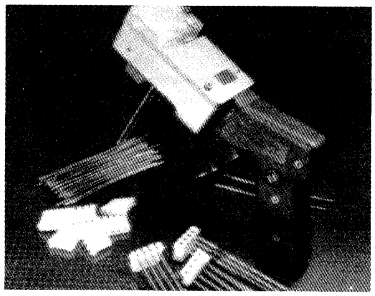


- For repair or prototype assembly

Ordering Information

Eng. No.	Order No.
AM 8600-13	11-02-0015

Terminator Handgun and Snap-on Module

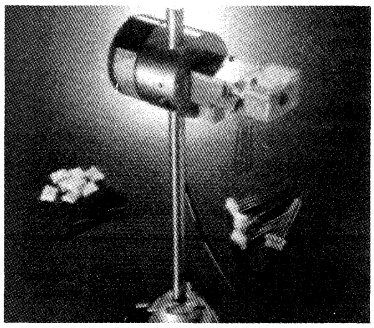


- Low volume - terminates up to four wires simultaneously

Ordering Information

Description	Eng. No.	Order No.
Pistol	AM 60114	11-21-5194
Snap-on Module (70156)	AM 60512A	11-21-9756
Hand Tool Moddule (71156)	AM 63175	11-32-60271

Pneumatic Adaptor for Module

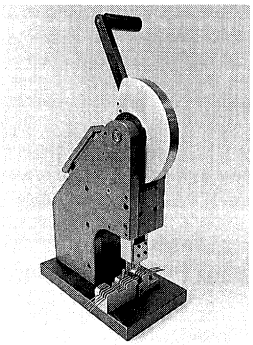


- For low to medium volume

Ordering Information

Eng. No.	Order No.
AM 60522	11-31-1570

High Force Press with Tooling



- For medium volume - terminates up to four wires simultaneously
- Feed-to and Feed-thru

Ordering Information

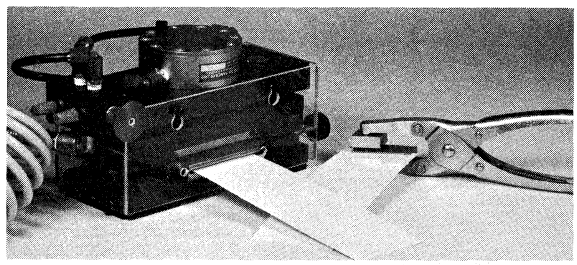
Eng. No.	Order No.
AM 60536 (70156)	11-20-0826
AM 63173 (71156)	11-20-1286

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Flat Flexible Cable Tooling

Manual and Air-Operated Punch for Molex 4850 Connector

- Air operated die set
- Adjustable punch locations
- Adjustable edge guide
- Cable end is notched between conductors to receive the 4850 locking fingers



Ordering Information

Eng. No.	Order No.	Description
AM4850-1	11-10-1043	Single hole punch hand tool
AM4850-11	11-10-1044	Multiple hole punch bench tool

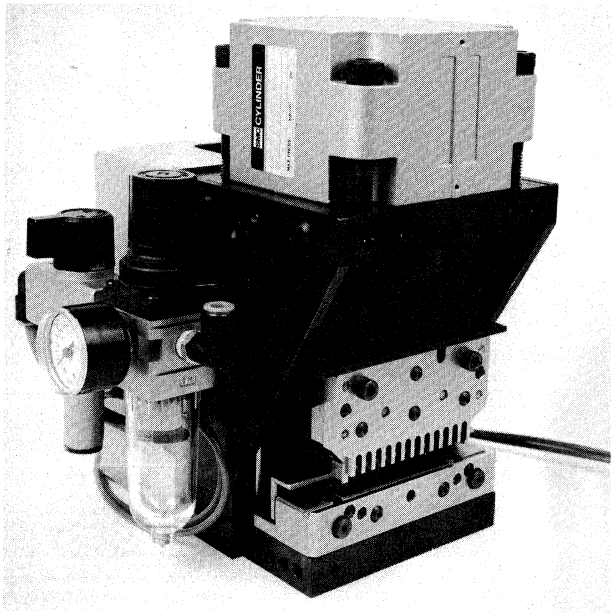
Insulation Displacement Application Tooling for 7720S, 8160G, 90410

Not Available in the U.S.

Preferred Version in Europe

PB11 Pneumatic Terminator

- Totally pneumatic
- Incorporates timer to ensure complete machine cycle
- Base unit is hand loaded. Can be adapted for magazine **or** auto-feed



Specifications

Weight: 21 kg.
Dimensions: 300mm x 250mm x 250mm
Press Stroke: 19mm 0.75"
Max. Working Pressure: 10 bar (150 psi)
Press Force: 6 bar (90 psi) 385 kg. (850 psi)
Air Consumption/ M/C Cycle: 2.15 1 (00.07 ft. sq.)

Ordering Information (Preferred Version in Europe)

Connector Eng. No.	PB11 Order No.	Remarks
7720S	69029-1019	Auto.
8160G	69029-1020	Auto.
90410	69029-1018	Auto.
90327	69029-1031	Auto.
90609	69029-1025	Auto.

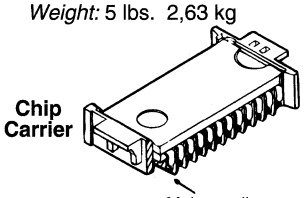
78804 / 5 / 7 Modular IC Socket System Termination Tooling

Manual Bench Tool, Double-Sided For Modular IC Socket System

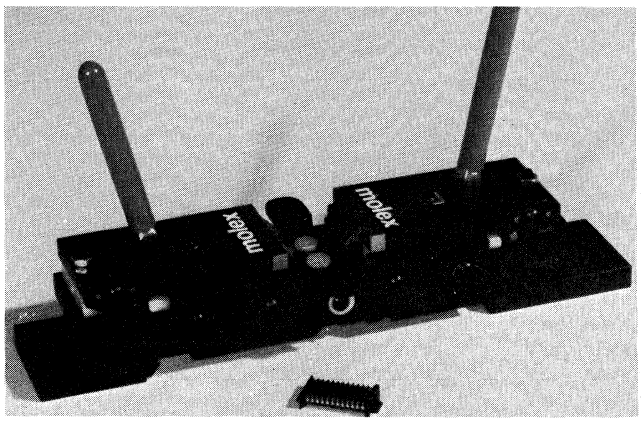
- Forms both sides of IC chip to carrier in one cycle
- Interchangeable inserts for 24, 28 and 32 circuit carriers
- Compact and lightweight
- Minimal operator effort required
- Provisions for static grounding
- Hourly production rate 400 assemblies
- Annual capacity 800,000 assemblies

Specifications

Width: 4½" 114mm
Length: 13" 330mm
Height: 6½" 165mm
Weight: 5 lbs. 2,63 kg



Molex tooling bends chip leads to clinch carrier



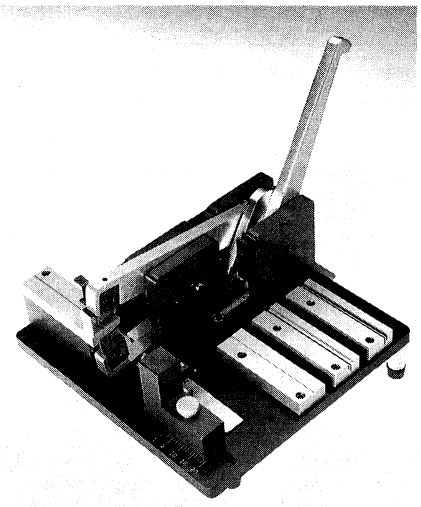
Ordering Information

IC Size	Base Machine with Tool Kit		Tool Kit Only		Base Machine Only	
	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.
24 Ckt.	11-20-0976	AM60161-51	11-20-0662	AM60161-100	11-20-0647	AM60161
28 Ckt.	11-20-0977	AM60161-52	11-20-0663	AM60161-200	11-20-0647	AM60161
32 Ckt.	11-20-0978	AM60161-53	11-20-0951	AM60161-500	11-20-0647	AM60161

Cutting Tools for .100" Center and .156" Center Breakaway Headers

.100" Center Tooling

- Manually operated
- Interchangeable nests included for various header types
- Accommodates header series: 42225, 42226, 42227, 42228, 42375, 42376, 42377, 42624, 70203, 70343, 70344, 8624

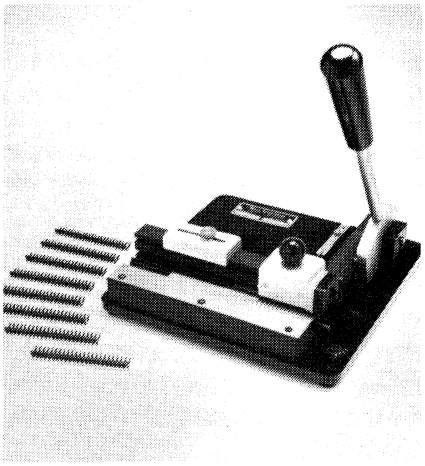


Ordering Information

Manual Tool		Replacement Blade		
Engr. No.	Order No.	Engr. No.	Order No.	Type
AM-63210	11-20-1230	AM-63210-01	11-32-4306	Upper
		AM-63210-02	11-32-4307	Lower

.156" Center Tooling

- Manually operated
- Tool indexes and cuts parts to variable lengths with simple set-up adjustment
- Accommodates header series: 41661, 41662, 41671, 41672 41681, 41682



Ordering Information

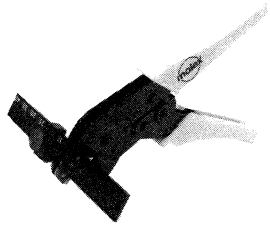
MANUAL TOOL		REPLACEMENT BLADE	
Engr. No.	Order No.	Engr. No.	Order No.
AM-60594	11-20-0901	AM-60594-18	11-31-7504

Preferred Version in Europe

Cutting Tool

For C-Grid III Unshrouded Headers

- Handtool for 2.54mm .100" and 3.96mm .156" pitch header cutting to length
- Incorporates a graduated slideway and stop for presetting of required header length. Maximum length of header which can be cut is 40 position.



Ordering Information (Preferred Version in Europe)

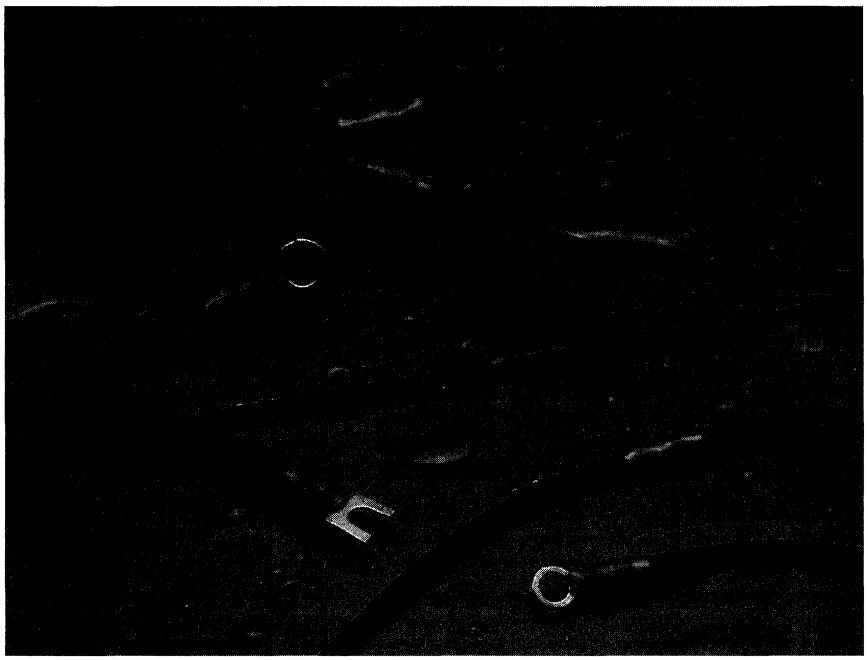
Order No.	69008-0350

M

Notes

Solderless Terminals, Splices, Quick Disconnects, Cable Ties, Tooling

Contents



Basic terminal construction features 2N
Ring tongue terminals (26 - 8 AWG) 3N
Ring tongue terminals (6 - 4/0 AWG) 4N
Spade terminals (22 - 10 AWG) 5N
Snap Spade terminals (22 - 10 AWG) 5N
Butt Splices 6N
Parallel Splices 6N
Closed-End Connectors 6N
Military Specification (MIL-Spec) Terminals 6N

Quick Disconnects

Fully Insulated 7N
Flags 7N
Female, Tape Fed & Loose Piece 8N
Strip Receptacles 9N
Metal Strip Open Barrel Star Rings w/Vibration Support 9N
Metal Strip Open Barrel Rings w/Vibration Support 9N
Special Products 10N

N

The following pages contain only a small sampling of Molex-ETC's offerings. Additional products include Self-Tapping Tap-and-Run connectors, Snap Plugs, Snap Plug Receptacles, Tab Adapters, Battery Cable Lugs, Terminal Block Hardware, Self-Tapping Wire Connectors, Heat Shrinkable Tubing, etc. Please see page 10N for specialized catalogs that we will gladly send to you at your request.

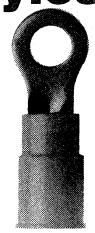
Styles

For a full line expanded catalog call
1-800-800-0364
Ext 206

Barrel Styles



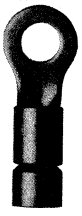
KRIMPTITE®
This is the basic Molex-ETC barrel style. It is non-insulated and its barrel has a butted seam. It is available in wire range 26-10 AWG.



INSULKRIMP®
These terminals and splices feature a rigid insulation sleeve of polyvinyl chloride (PVC) affixed permanently to the Krimptite barrel in 22-10 AWG wire size, and the brazed seam Versakrimp barrel in 22-4/0 AWG wire size. The funnel entrance into the electrical barrel eliminates strand "hang up".



VERSAKRIMP™
These brazed-seam barrel terminals and splices will not open under conditions of stress or wire pull. It is available in the 22-4/0 AWG wire range.



VIBRAKRIMP®
These terminals are formed by adding a seamless, tin plated, brass sleeve to the basic Krimptite barrel. These parts are used when heavy vibration is anticipated.



NYLAKRIMP®
This terminal is formed by affixing a permanent, color coded, rigid overhanging nylon insulating sleeve to a barrel. The Nylakrimp withstands continuous-duty operation temperatures of -67°F to 221°F (-55°C to 105°C).



AVIKRIMP®
This color coded barrel style makes up our top of the line terminal. The tin-plated brass sleeve strengthens the barrel and secures the wire to protect against stress and high vibration. The permanently-attached, color coded nylon insulating sleeve extends beyond the metal support sleeve. A funnel ferrule wire entrance into the electrical barrel prevents wire strand foldback. Available in wire range 26-10 AWG.



PERMA-SEAL™
The ultimate in terminations and splicing, Perma Seal NYLON terminals and splices provide a rugged, environmentally-sealed connection for wire sizes 22-10 AWG that will insulate, seal, and protect joints from physical abuse and abrasion, water, salt, and other corrosive compounds.

Tongue Styles



RING
The basic tongue type. It is the safest and most reliable since it cannot be disconnected unless the screw is completely removed.



SPADE
The open tongue end is for rapid insertion on the mounting screw. The spade is usually used on free standing studs.



SNAP SPADE
The spring-like tongue snaps around the screw like a Quick-Disconnect and the terminal is locked into place until the mounting screw can be tightened down.



FLANGED SPADE
The turned up edges give this spade more safety and reliability. The flanges also give both a location and locking action that aids greatly in installation.



RECTANGULAR
This style has all the security and safety of the ring tongue plus the added feature of parallel straight edges which secure the terminal firmly between the raised barriers of terminal blocks.



HOOK
This tongue type combines the security advantage of the ring with the easy handling characteristics of the spade.



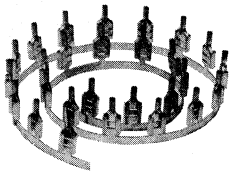
BLOCK SPADE
This tongue style is similar to the spade. However, note the longer and flatter sides. Block Spades are designed for use in terminal blocks.



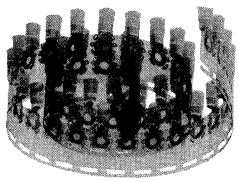
SLOTTED RING
This tongue style gives the design engineer maximum flexibility. All ring tongues can be slotted to give the ease of assembly feature of a spade.

Carrier Styles

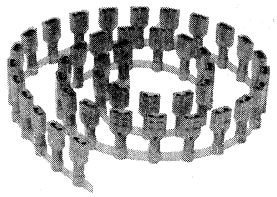
Special reel sizes available upon request. For high-speed, volume-production crimping, many companies in a wide range of industries have come to rely on Molex-ETC's Tape-mounted and Continuous Molded Strip terminals and automatic crimping presses to give them the highest-quality end-product at the lowest applied cost.



METAL STRIP
Quick Disconnects are available on a continuous metal carrier. These parts feature open barrels for rapid wire insertion. They are made in the traditional "T" carrier. These products are crimped in the Molex TM-40, Molex-ETC presses, applicators and are used for high-speed, low cost production.



MYLAR TAPE CARRIERS
Most Molex-ETC terminals in the 26 thru 4 AWG wire range and Fully Insulated Quick Disconnects can be tape-mounted and, when used with one of our air powered, automatic tape crimping presses, can deliver up to 3,600 crimps per hour. This carrier gives the most flexibility in the production area.



CONTINUOUS MOLDED STRIP
The fully-insulated line of Quick-Disconnects are also available in easy-to-identify, color-coded, continuous molded nylon strips. When used with the Molex-ETC ATP-101 CBC air powered crimping press, you can make up to 3,600 crimps per hour, greatly reducing your overall applied costs.

Splices



BUTT SPLICE
Stripped wires are inserted from each end and "butt" in the center. Then a crimp at each end secures the connection.



PARALLEL SPLICE
Stripped wires lie side by side in the splice and are secured by a single crimp in the middle.



NYLON CLOSED-END CONNECTOR
Used in a wide variety of situations to "pigtail" or tie together two or more wires.

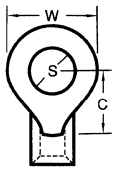
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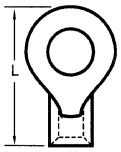
26 to 4/0 Wire Range

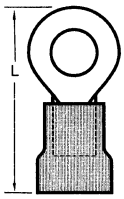
For a full line expanded catalog call
1-800-800-0364
Ext 206

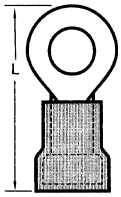
molex® ETC

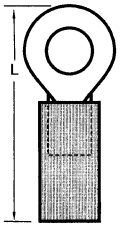
Ring Tongue Terminals

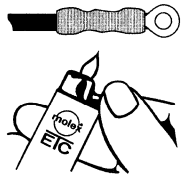












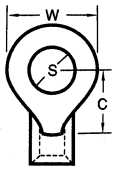
MATERIAL: COPPER				VERSAKRIMP™		INSULKRIMP®		AVIKRIMP®		NYLAKRIMP®		PERMA SEAL™
Wire Range	Stud Size S	Max. Width W	Min. Clearance C	Part #	Max. Length L	Part #	Max. Length L	Part #	Max. Length L	Part #	Max. Length L	Part #
	2 (2)	.150 (3,8)	.121 (3,1)					M-8122-02	.536 (13,6)			
26	4 (2,6)	.213 (5,4)	.215 (5,5)					M-8113-04	.662 (16,8)			
24	6 (3,5)	.213 (5,4)	.215 (5,5)					M-8113-06	.662 (16,8)			
	8 (4)	.260 (6,6)	.290 (7,4)					M-8118-08	.760 (19,3)			
	10 (-)	.260 (6,6)	.290 (7,4)					M-8118-10	.760 (19,3)			
	1-2 (2)	.235 (6,0)	.157 (3,9)	AA-320-02	.484 (12.3)	AA-220-02X	.709 (18,0)	AA-820-02	.709 (18,0)			
	3-4 (2,6)	.235 (6,0)	.157 (3,9)	AA-320-04	.484 (12,3)	AA-220-04X	.709 (18,0)	AA-820-04	.709 (18,0)			
	5-6 (3-3,5)	.264 (6,7)	.240 (6,1)	AA-332-06	.582 (14,8)	AA-232-06X	.807 (20,5)	AA-832-06	.807 (20,5)			
	5-6 (3-3,5)	.322 (8,2)	.300 (7,6)	AA-321-06	.671 (17,0)	AA-221-06X	.896 (22,8)	AA-821-06	.896 (22,8)			SA-221-06
22	8 (4)	.264 (6,7)	.240 (6,1)	AA-332-08	.582 (14,8)	AA-232-08X	.807 (20,5)	AA-832-08	.807 (20,5)			
18	8 (4)	.322 (8,2)	.300 (7,6)	AA-321-08	.671 (17,0)	AA-221-08X	.896 (22,8)	AA-821-08	.896 (22,8)			SA-221-08
	10 (-)	.322 (8,2)	.300 (7,6)	AA-321-10	.671 (17,0)	AA-221-10X	.896 (22,8)	AA-821-10	.896 (22,8)			SA-221-10
	1/4 (6)	.477 (12,1)	.386 (9,8)	AA-322-14	.835 (21,2)	AA-222-14X	1.060 (26,9)	AA-822-14	1.060 (26,9)			SA-222-14
	5/16 (8)	.477(12,1)	.386 (9,8)	AA-322-56	.835 (21,2)	AA-222-56X	1.060 (26,9)	AA-822-56	1.060 (26.9)			
	3/8 (9)	.544 (13,8)	.552 (14,0)	AA-326-38	1.034 (26,3)	AA-226-38X	1.259 (31,9)	AA-826-38	1.259 (31,9)			SA-226-38
	1-2 (2)	.260 (6,6)	.209 (5,3)	BB-323-02	.560 (14,2)	BB-223-02X	.785 (19,9)	BB-823-02	.800 (20,3)			
	3-4 (2,6)	.260 (6,6)	.209 (5,3)	BB-323-04	.560 (14,2)	BB-223-04X	.785 (19,9)	BB-823-04	.800 (20,3)			
	5-6 (3-3,5)	.260 (6,6)	.209 (5,3)	BB-323-06	.560 (14,2)	BB-223-06X	.785 (19,9)	BB-823-06	.800 (20,3)			
	5-6 (3-3,5)	.322 (8,2)	.275 (7,0)	BB-337-06	.640 (16,3)	BB-237-06X	.865 (22,0)	BB-837-06	.880 (22,4)			SB-237-06
	8 (4)	.260 (6,6)	.209 (5,3)	BB-323-08	.560 (14,2)	BB-223-08X	.785 (19,9)	BB-823-08	.800 (20,3)			
16	8 (4)	.322 (8,2)	.275 (7,0)	BB-337-08	.640 (16,3)	BB-237-08X	.865 (22,0)	BB-837-08	.880 (22,4)			SB-237-08
14	8 (4)	.352 (8,9)	.310 (7,9)	BB-339-08	.696 (17,7)	BB-239-08X	.921 (23,3)	BB-839-08	.936 (23,4)			
	10 (-)	.322 (8,2)	.275 (7,0)	BB-337-10	.640 (16,3)	BB-237-10X	.865 (22,0)	BB-837-10	.880 (22,4)			SB-237-10
	10 (-)	.352 (8,9)	.310 (7,9)	BB-339-10	.696 (17,7)	BB-239-10X	.921 (23,3)	BB-839-10	.936 (23,4)			
	1/4 (6)	.477 (12,1)	.388 (9,9)	BB-325-14	.837 (21,2)	BB-225-14X	1.062 (27,0)	BB-825-14	1.077 (27,3)			SB-225-14
	5/16 (8)	.477 (12,1)	.388 (9,9)	BB-325-56	.837 (21,2)	BB-225-56X	1.062 (27,0)	BB-825-56	1.077 (27,3)			SB-225-56
	3/8 (9)	.544 (13,8)	.535 (13,6)	BB-318-38	1.010 (26,0)	BB-218-38X	1.235 (31,3)	BB-818-38	1.250 (32,0)			SB-218-38
	5-6 (3-3,5)	.385 (9,8)	.303 (7,7)	B-128-06HD	.785 (19,9)	B-228-06HDX	1.076 (27,3)	B-828-06HDX	1.091 (27,7)			
16-14	8 (4)	.385 (9,8)	.303 (7,7)	B-128-08HD	.785 (19,9)	B-228-08HDX	1.076 (27,3)	B-828-08HDX	1.091 (27,7)			
Heavy	1/4 (6)	.540 (13,7)	.393 (10,0)	B-130-14HD	.952 (24,2)	B-230-14HDX	1.243 (31,6)	B-830-14HDX	1.258 (32,0)			
Duty	5/6 (8)	.540 (13,7)	.393 (10,0)	B-130-56HD	.952 (24,2)	B-230-56HDX	1.243 (31,6)	B-830-56HDX	1.258 (32,0)			
	3/8 (9)	.598 (15,2)	.466 (11,8)	B-140-38HD	1.056 (26,8)	B-240-38HDX	1.347 (34,2)	B-840-38HDX	1.362 (34,6)			
	5-6 (3-3,5)	.292 (7,4)	.306 (7,8)	C-336-06	.741(18,8)	C-236-06X	1.032 (26,2)	C-836-06X	1.047 (27,0)			
	5-6 (3-3,5)	.385 (9,8)	.303 (7,7)	C-328-06	.785 (19,9)	C-228-06X	1.076 (27,3)	C-828-06X	1.091 (27,7)			SC-228-06
	8 (4)	.292 (7,4)	.306 (7,8)	C-336-08	.741(18,8)	C-236-08X	1.032 (26,2)	C-836-08X	1.047 (27,0)			
	8 (4)	.385 (9,8)	.303 (7,7)	C-328-08	.785 (19,9)	C-228-08X	1.076 (27,3)	C-828-08X	1.091 (27,7)			SC-228-08
	10 (-)	.385 (9,8)	.303 (7,7)	C-328-10	.785 (19,9)	C-228-10X	1.076 (27,3)	C-828-10X	1.091 (27,7)			
12	10 (-)	.540(13,7)	.393 (10,0)	C-330-10	.952 (24,2)	C-230-10X	1.243 (31,6)	C-830-10X	1.258 (32,0)			SC-230-10
10	1/4 (6)	.540(13,7)	.393 (10,0)	C-330-14	.952 (24,2)	C-230-14X	1.243 (31,6)	C-830-14X	1.258 (32,0)			SC-230-14
	1/4 (6)	.598 (15,1)	.566 (14,3)	C-340-14	1.056 (26,8)	C-240-14X	1.347 (34,2)	C-840-14X	1.362 (34,6)			
	5/16 (8)	.540(13,7)	.393 (10,0)	C-330-56	.952 (24,2)	C-230-56X	1.243 (31,6)	C-830-56X	1.258 (32,0)			SC-230-56
	5/16 (8)	.598 (15,2)	.566 (14,4)	C-340-56	1.056 (26,8)	C-240-56X	1.347 (34,2)	C-840-56X	1.362 (34,6)			
	3/8 (9)	.598 (15,2)	.566 (14,4)	C-340-38	1.056 (26,8)	C-240-38X	1.347 (34,2)	C-840-38X	1.362 (34,6)			SC-240-38
	1/2 (12)	.760 (19,3)	.611 (15,3)	C-301-12	1.280 (32,5)	C-201-12X	1.571 (39,9)	C-801-12X	1.586 (40,3)			SC-201-12
	6 (3-3,5)	.389 (9,9)	.368 (9,3)	D-356-06	.937 (23,8)	D-656-06X	1.252 (31,8)			D-756-06	1.232 (31,3)	
	8 (4)	.389 (9,9)	.368 (9,3)	D-356-08	.937 (23,8)	D-656-08X	1.252 (31,8)			D-756-08	1.232 (31,3)	
	10 (-)	.483 (12,3)	.368 (9,3)	D-350-10	.984 (25,0)	D-650-10X	1.299 (33,0)			D-750-10	1.279 (32,5)	SD-810*
	10 (-)	.389 (9,9)	.368 (9,3)	D-356-10	.937 (23,8)	D-656-10X	1.252 (31,8)			D-756-10	1.232 (31,3)	
8	1/4 (6)	.483 (12,3)	.368 (9,3)	D-350-14	.984 (25,0)	D-650-14X	1.299 (33,0)			D-750-14	1.279 (32,5)	SD-814*
	1/4 (6)	.603 (15,3)	.433 (11,0)	D-351-14	1.106 (28,1)	D-651-14X	1.421 (36,1)			D-751-14	1.401 (35,6)	
	5/16 (8)	.603 (15,3)	.433 (11,0)	D-351-56	1.106 (28,1)	D-651-56X	1.421 (36,1)			D-751-56	1.401 (35,6)	SD-8516*
	3/8 (9)	.603 (15,3)	.433 (11,0)	D-351-38	1.106 (28,1)	D-651-38X	1.421 (36,1)			D-751-38	1.401 (35,6)	SD-838*
	7/16 (11)	.825 (21,0)	.616 (15,6)	D-352-76	1.403 (35,6)	D-652-76X	1.718 (43,6)			D-752-76	1.698 (43,1)	

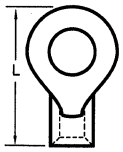
Note: For terminals on Mylar Tape, add "T" at the end of the loose piece part number.
* For all dimensions regarding this product please contact the factory.

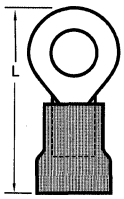
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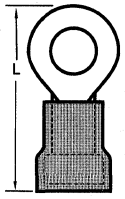
26 to 4/0 (cont'd) Wire Range

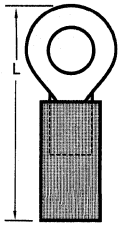
Ring Tongue Terminals

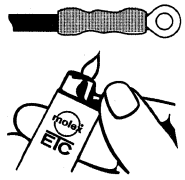












MATERIAL COPPER				VERSAKRIMP™		INSULKRIMP®		AVIKRIMP®		NYLAKRIMP®		PERMA SEAL™
Wire Range	Stud Size S	Max. Width W	Min. Clearance C	Part #	Max. Length L	Part #	Max. Length L	Part #	Max. Length L	Part #	Max. Length L	Part #
6	8 (4)	.485 (12,3)	.518 (13,2)	E-360-08	1.188 (30,2)	E-660-08X	1.593 (40,5)			E-760-08	1.558 (39,6)	
	10 (-)	.485 (12,3)	.518 (13,2)	E-360-10	1.188 (30,2)	E-660-10X	1.593 (40,5)			E-760-10	1.558 (39,6)	
	1/4 (6)	.645 (16,4)	.518 (13,2)	E-357-14	1.268 (32,2)	E-657-14X	1.673 (42,5)			E-757-14	1.638 (41,6)	
	1/4 (6)	.485 (12,3)	.518 (13,2)	E-360-14	1.188 (30,2)	E-660-14X	1.593 (40,5)			E-760-14	1.558 (39,6)	
	5/16 (8)	.645 (16,4)	.518 (13,2)	E-357-56	1.268 (32,2)	E-657-56X	1.673 (42,5)			E-757-56	1.638 (41,6)	
	3/8 (9)	.645 (16,4)	.518 (13,2)	E-357-38	1.268 (32,2)	E-657-38X	1.673 (42,5)			E-757-38	1.638 (41,6)	
4	10 (-)	.490 (12,4)	.527 (13,4)	F-367-10	1.261 (32,0)	F-667-10X	1.744 (44,3)			F-767-10	1.689 (42,9)	
	1/4 (6)	.490 (12,4)	.527 (13,4)	F-367-14	1.261 (32,0)	F-667-14X	1.744 (44,3)			F-767-14	1.689 (42,9)	
	5/16 (8)	.680 (17,3)	.527 (13,4)	F-366-56	1.357 (34,5)	F-666-56X	1.840 (46,7)			F-766-56	1.785 (45,3)	
	3/8 (9)	.680 (17,3)	.527 (13,4)	F-366-38	1.357 (34,5)	F-666-38X	1.840 (46,7)			F-766-38	1.785 (45,3)	
	7/16 (11)	.680 (17,3)	.527 (13,4)	F-366-76	1.357 (34,5)	F-666-76X	1.840 (46,7)			F-766-76	1.785 (45,3)	
	1/2 (12)	.680 (17,3)	.527 (13,4)	F-366-12	1.357 (34,5)	F-666-12X	1.840 (46,7)			F-766-12	1.785 (45,3)	
2	1/4 (6)	.645 (16,3)	.703 (17,9)	G-375-14	1.583 (40,2)	G-675-14X	2.093 (53,1)			G-775-14	2.078 (52,8)	
	5/16 (8)	.645 (16,3)	.703 (17,9)	G-375-56	1.583 (40,2)	G-675-56X	2.093 (53,1)			G-775-56	2.078 (52,8)	
	3/8 (9)	.645 (16,3)	.703 (17,9)	G-375-38	1.583 (40,2)	G-675-38X	2.093 (53,1)			G-775-38	2.078 (52,8)	
	1/2 (12)	.879 (22,3)	.703 (17,9)	G-374-12	1.700 (43,1)	G-674-12X	2.210 (56,1)			G-774-12	2.195 (55,8)	
1/0	1/4 (6)	.840 (21,3)	.750 (19,1)	H-381-14	1.920 (49,0)	H-681-14X	2.630 (66,8)			H-781-14	2.544 (64,6)	
	5/16 (8)	.840 (21,3)	.750 (19,1)	H-381-56	1.920 (49,0)	H-681-56X	2.630 (66,8)			H-781-56	2.544 (64,6)	
	3/8 (9)	.840 (21,3)	.750 (19,1)	H-381-38	1.920 (49,0)	H-681-38X	2.630 (66,8)			H-781-38	2.544 (64,6)	
2/0	1/4 (6)	.948 (24,1)	.770 (19,6)	J-385-14	2.019 (51,3)	J-685-14X	2.654 (67,4)			J-785-14	2.654 (67,4)	
	5/16 (8)	.948 (24,1)	.770 (19,6)	J-385-56	2.019 (51,3)	J-685-56X	2.654 (67,4)			J-785-56	2.654 (67,4)	
	3/8 (9)	.948 (24,1)	.770 (19,6)	J-385-38	2.019 (51,3)	J-685-38X	2.654 (67,4)			J-785-38	2.654 (67,4)	
	1/2 (12)	.948 (24,1)	.770 (19,6)	J-385-12	2.019 (51,3)	J-685-12X	2.654 (67,4)			J-785-12	2.654 (67,4)	
3/0	5/16 (8)	1.067 (27,1)	.805 (20,4)	K-390-56	2.154 (55,7)	K-690-56X	3.029 (76,9)			K-790-56	2.929 (74,4)	
	3/8 (9)	1.067 (27,1)	.805 (20,4)	K-390-38	2.154 (55,7)	K-690-38X	3.029 (76,9)			K-790-38	2.929 (74,4)	
	1/2 (12)	1.067 (27,1)	.805 (20,4)	K-390-12	2.154 (55,7)	K-690-12X	3.029 (76,9)			K-790-12	2.929 (74,4)	
4/0	1/2 (12)	1.135 (28,8)	.830 (21,1)	L-395-12	2.215 (56,3)					L-795-12	2.980 (75,7)	
	5/8 (16)	1.135 (28,8)	.830 (21,1)	L-395-58	2.215 (56,3)					L-795-58	2.980 (75,7)	

N

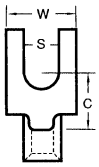
Note: For terminals on Mylar Tape, add "T" at the end of the loose piece part number.

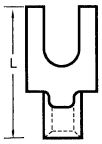
Styles

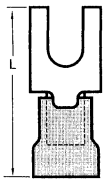
For a full line expanded catalog call
1-800-800-0364
Ext 206

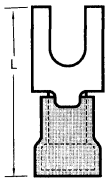
molex ETC

Spade Terminals





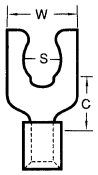


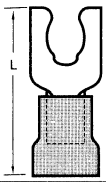


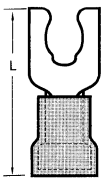


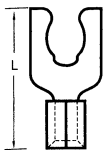
				VERSAKRIMP®		INSULKRIMP®		AVIKRIMP®		PERMA SEAL™
Wire Range	Stud Size S	Max. Width W	Min. Clearance C	Part #	Max. Length L	Part #	Max. Length L	Part #	Max. Length L	Part #
	3-4 (2,6)	.197 (5,0)	.183 (4,6)	AA-3109-04	.502 (12,8)	AA-2109-04X	.727 (18,4)	AA-8109-04	.727 (18,4)	SA-2109-04
	5-6 (3-3,5)	.255 (6,5)	.207 (5,3)	AA-338-06	.560 (14,2)	AA-238-06X	.785 (19,9)	AA-838-06	.785 (19,9)	SA-238-06
22	5-6 (3-3,5)	.260 (6,5)	.325 (8,2)	AA-3118-06	.670 (17,0)	AA-2118-06X	.895 (22,7)	AA-8118-06	.895 (22,7)	SA-2118-06
18	8 (4)	.301 (7,6)	.207 (5,3)	AA-334-08	.560 (14,2)	AA-234-08X	.785 (19,9)	AA-834-08	.785 (19,9)	SA-234-08
	10 (-)	.301 (7,6)	.207 (5,3)	AA-334-10	.560 (14,2)	AA-234-10X	.785 (19,9)	AA-834-10	.785(19,9)	SA-234-10
	10 (-)	.385 (9,8)	.235 (6,0)	AA-394-10	.643 (16,3)	AA-294-10X	.868 (22,0)	AA-894-10	.868 (22,0)	SA-294-10
	3-4 (2,6)	.209 (5,3)	.229 (5,8)	BB-3471-04	.559 (14,2)	BB-2471-04X	.784 (19,9)	BB-8471-04	.799 (20,3)	
16	3-4 (2,6)	.255 (6,5)	.209 (5,3)	BB-307-04	.565 (14,4)	BB-207-04X	.790 (20,1)	BB-807-04	.805 (20,5)	
14	5-6 (3-3,5)	.211 (5,4)	.231 (5,9)	BB-3781-06	.556 (14,1)	BB-2781-06X	.781 (19,8)	BB-8781-06	.796 (20,2)	
	5-6 (3-3,5)	.255 (6,5)	.209 (5,3)	BB-307-06	.565 (14,4)	BB-207-06X	.790 (20,1)	BB-807-06	.805 (20,5)	
	8 (4)	.211 (5,4)	.231 (5,9)	BB-3781-08	.556 (14,1)	BB-2781-08X	.781 (19,8)	BB-8781-08	.796 (20,2)	
	10 (-)	.372 (9,4)	.269 (6,8)	BB-327-10	.687 (17,4)	BB-227-10X	.912 (23,2)	BB-827-10	.927 (23,6)	
	5-6 (3-3,5)	.385 (9,8)	.301 (7,6)	C-341-06	.812 (20,6)	C-241-06X	1.103 (28,0)	C-841-06X	1.118 (28,4)	
12	8 (4)	.385 (9,8)	.301 (7,6)	C-341-08	.812 (20,6)	C-241-08X	1.103 (28,0)	C-841-08X	1.118 (28,4)	
10	10 (-)	.385 (9,8)	.301 (7,6)	C-341-10	.812 (20,6)	C-241-10X	1.103 (28,0)	C-841-10X	1.118 (28,4)	
	1/4 (6)	.543 (13,8)	.393 (10,0)	C-368-14	.965 (24,5)	C-268-14X	1.256 (31,9)	C-868-14X	1.271 (32,3)	
	5/16 (8)	.543 (13,8)	.393 (10,0)	C-368-56	.965 (24,5)	C-268-56X	1.256 (31,9)	C-868-56X	1.271 (32,3)	

Snap Spade Terminals









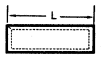
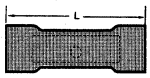
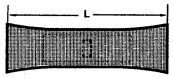
				INSULKRIMP®		AVIKRIMP®		KRIMPTITE®	
Wire Range	Stud Size S	Max. Width W	Min. Clearance C	Part #	Max. Length L	Part #	Max. Length L	Part #	Max. Length L
	5 (3)	.260 (6,6)	.230 (5,8)	AA-2704-05X	.810 (20,6)	AA-8704-05	.810 (20,6)	AA-1704-05	.585 (14,8)
	5-6 (3-3,5)	.260 (6,6)	.230 (5,8)	AA-2704-06X	.810 (20,6)	AA-8704-06	.810 (20,6)	AA-1704-06	.585 (14,8)
	5-6 (3-3,5)	.270 (6,8)	.235 (6,0)	AA-2190-06X	.870 (22,1)	AA-8190-06	.870 (22,1)	AA-1190-06	.645 (16,4)
22	8 (4)	.300 (7,6)	.235 (6,0)	AA-2191-08X	.880 (22,4)	AA-8191-08	.880 (22,4)	AA-1191-08	.655 (16,6)
18	8 (4)	.320 (8,1)	.261 (6,6)	AA-2714-08X	.871 (22,1)	AA-8714-08	.871 (22,1)	AA-1714-08	.646 (16,4)
	10 (-)	.338 (8,6)	.235 (6,0)	AA-2192-10X	.930 (23,6)	AA-8192-10	.930 (23,6)	AA-1192-10	.705 (17,9)
	10 (-)	.340 (8,6)	.261 (6,6)	AA-2715-10X	.919 (23,3)	AA-8715-10	.919 (23,3)	AA-1715-10	.694 (17,6)
	5 (3)	.260 (6,6)	.230 (5,8)	BB-2707-05X	.810 (20,6)	BB-8707-05	.825 (21,0)	BB-1707-05	.585 (14,8)
	5-6 (3-3,5)	.260 (6,6)	.230 (5,8)	BB-2707-06X	.810 (20,6)	BB-8707-06	.825 (21,0)	BB-1707-06	.585 (14,8)
16	5-6 (3-3,5)	.270 (6,8)	.235 (6,0)	BB-2193-06X	.870 (22,1)	BB-8193-06	.885 (22,5)	BB-1193-06	.645 (16,4)
14	8 (4)	.300 (7,6)	.235 (6,0)	BB-2194-08X	.880 (22,4)	BB-8194-08	.895 (22,7)	BB-1194-08	.655 (16,6)
	8 (4)	.320 (8,1)	.261 (6,6)	BB-2716-08X	.871 (22,1)	BB-8716-08	.886 (22,5)	BB-1716-08	.646 (16,4)
	10 (-)	.338 (8,6)	.235 (6,0)	BB-2195-10X	.930 (23,6)	BB-8195-10	.945 (24,0)	BB-1195-10	.705 (17,9)
	10 (-)	.340 (8,6)	.261 (6,6)	BB-2717-10X	.919 (23,3)	BB-8717-10	.934 (23,7)	BB-1717-10	.694 (17,6)
	5 (3)	.260 (6,6)	.230 (5,8)	C-2710-05X	.995 (24,3)	C-8710-05	.970 (24,6)	C-1710-05	.664 (16,9)
	5-6 (3-3,5)	.260 (6,6)	.230 (5,8)	C-2710-06X	.995 (24,3)	C-8710-06	.970 (24,6)	C-1710-06	.664 (16,9)
	5-6 (3-3,5)	.300 (7,6)	.305 (7,8)	C-2196-06X	1.097 (27,9)	C-8196-06	1.112 (28,2)	C-1196-06	.806 (20,5)
12	8 (4)	.330 (8,4)	.305 (7,8)	C-2197-08X	1.125 (28,5)	C-8197-08	1.140 (29,0)	C-1197-08	.834 (21,2)
10	8 (4)	.320 (8,1)	.261 (6,6)	C-2718-08X	1.016 (25,7)	C-8718-08	1.031 (26,2)	C-1718-08	.725 (18,4)
	10 (-)	.330 (8,4)	.305 (7,8)	C-2198-10X	1.145 (29,1)	C-8198-10	1.160 (29,5)	C-1198-10	.854 (21,7)
	10 (-)	.340 (8,6)	.261 (6,6)	C-2719-10X	1.064 (27,0)	C-8719-10	1.079 (27,4)	C-1719-10	.773 (19,6)
	1/4 (6)	.425 (10,8)	.375 (9,5)	C-2199-14X	1.271 (32,3)	C-8199-14	1.286 (32,3)	C-1199-14	.980 (24,9)

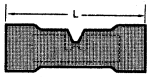
Note: For terminals on Mylar Tape, add "T" at the end of the loose piece part number.

N

Styles

Butt Splices

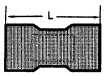
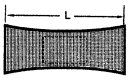






Wire Range	VERSAKRIMP® P/N	I.D. Min.	O.D. Max.	Max. Length L	INSULKRIMP® P/N	Max. Length L	NYLAKRIMP® P/N	Max. Length L	PERMA SEAL™ P/N	WINDOW BUTTS P/N	Max. Length L
22-18	AS-345	.059 (1,5)	.130 (3,3)	.675 (17,1)	A-245X	.955 (24,3)	AS-N-345	1.035 (26,3)	SAA-22-18	WA-840	1.270 (32,3)
16-14	BS-331	.091 (2,3)	.160 (4,1)	.675 (17,1)	B-231X	1.020 (25,9)	BS-N-331	1.080 (27,4)	SBB-16-14	WB-841	1.270 (32,3)
12-10	CS-346	.138 (3,5)	.223 (5,7)	.827 (21,0)	C-246X	1.135 (28,8)	CS-N-346	1.300 (33,0)	SC-12-10	WC-842	1.630 (41,4)

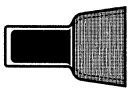
Note: For terminals on Mylar Tape, add "T" at the end of the loose piece part number.

Parallel Splices

Wire Range	VERSAKRIMP™ P/N	Max. Length L	INSULKRIMP® P/N	I.D.Min.	O.D.Max.	Max. Length L	NYLAKRIMP® P/N	Max. Length L
22-18	AS-302	.332 (8,4)	AS-V-302X	.060 (1,5)	.130 (3,3)	.712 (18,1)	AS-N-302	.670 (17,0)
16-14	BS-304	.091 (2,3)	B-204X	.084 (2,1)	.165 (4,2)	.735 (18,7)	BS-N-304	.645 (16,4)

Nylon-insulated, closed-end connectors



Wire Range	Part Number	Outside Diameter O.D.
22-14 (0,25-2,6mm^2)	NC-2214	.31 (7,8)
22-12 (0,25-4,0mm^2)	NC-2212	.35 (8,9)
16-10 (1,0-6,6mm^2)	NC-1610	.44 (11,2)
8 (6,6-10,5mm^2)	NC-8	.56 (14,2)

Note: For terminals on Mylar Tape, add "T" at the end of the loose piece part number.

Military Specifications Ring Tongue Terminals

MS-20659 TYPE I NON-INSULATED

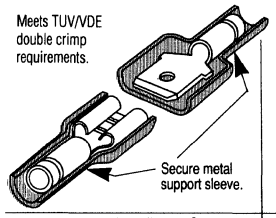
MS-20659 Dash No.	Molex-ETC Part No.	MS-20659 Dash No.	Molex-ETC Part No.	MS-20659 Dash No.	Molex-ETC Part No.
-101	AA-420-06	-123ASG	L-395-38	-145	F-369-12
-102	AA-421-10	-124	L-395-12	-146 ASG	G-375-10
-103	BB-437-06	-125	AA-426-38	-147	G-375-56
-104	BB-437-10	-126	BB-423-06	-148	G-374-76
-105	C-328-10	-127	BB-418-38	-149	H-381-56
-106	C-330-56	-128	C-340-38	-150	H-380-76
-107	D-356-10	-129	D-351-38	-151	H-381-56
-108	D-351-56	-130	E-360-10	-152	H-380-76
-109	E-360-14	-131	E-357-56	-153	J-385-14
-110	E-357-38	-132	F-366-56	-154	J-385-76
-111	F-367-14	-133	G-374-12	-155ASG	K-390-56
-112	F-366-38	-134	H-380-12	-156	K-390-76
-113	G-375-14	-135	H-380-12	-158	L-395-76
-114	G-375-38	-136	J-385-12	-159	L-395-58
-115	H-381-14	-137	L-398-78	-160	L-398-34
-116	H-381-38	-138	AA-420-04	-161	AA-426-56
-117	H-381-14	-139	BB-423-04	-163	BB-418-56
-118	H-381-38	-140	D-356-08	-165	C-336-06
-119	J-385-56	-141	D-350-14	-166	C-301-12
-120	J-385-38	-142	D-352-12		
-121	K-390-38	-143	E-358-12		
-122	K-390-12	-144	F-367-10		

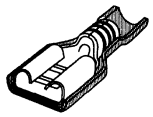
MS-25036 TYPE II INSULATED

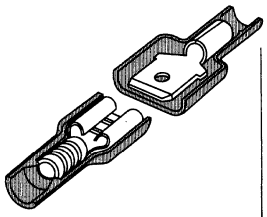
MS-25036 Dash No.	Molex-ETC Part No.	MS-25036 Dash No.	Molex-ETC Part No.	MS-25036 Dash No.	Molex-ETC Part No.
-101	AA-820-06	-121	E-757-56	-141	L-795-12
-102	AA-832-06	-122	E-757-38	-143	M-8114-02
-103	AA-821-10	-123	F-767-14	-144	M-8113-04
-104	AA-822-56	-124	F-766-56	-145	M-8118-06
-105	AA-826-38	-125	F-766-38	-146	M-8118-08
-106	BB-823-06	-126	G-775-14	-147	M-8118-10
-107	BB-837-06	-127	G-775-38	-148	AA-820-04
-108	BB-837-10	-128	G-774-12	-149	AA-821-08
-109	BB-825-56	-129	H-781-14	-150	AA-822-14
-110	BB-818-38	-130	H-781-38	-152	BB-823-04
-111	C-828-06	-131	H-780-12	-153	BB-837-08
-112	C-828-10	-132	H-781-14	-154	BB-825-14
-113	C-830-56	-133	H-781-38	-156	C-828-08
-114	C-840-38	-134	H-780-12	-157	C-830-14
-115ASG	D-750-10	-135	J-785-14	-159	AA-820-02
-116	D-750-14	-136	J-785-38		
-117	D-751-56	-137	J-785-12		
-118	D-751-38	-138	K-790-38		
-119	E-760-10	-139	K-790-12		
-120	E-760-14	-140	L-795-38		

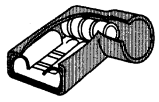
N

Fully Insulated Quick Disconnects





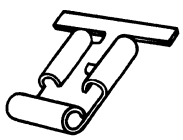


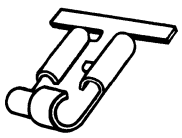


		AVIKRIMP®		INSULKRIMP®		COUPLERS		FLAGS	
Wire Size	Tab Size	ETC P/N (Female)	ETC P/N (Male)	ETC P/N (Standard Flare)	ETC P/N (Expanded Flare)	ETC P/N (Female)	ETC P/N (Male)	ETC P/N (Standard Flare)	ETC P/N (Expanded Flare)
26-24 AWG .14-.35mm	.250 x .032			M-2212					
26-24 AWG .14-.35mm	.187 x .032			M-2211					
26-24 AWG .14-.35mm	.187 x .020			M-2210					
22-18 AWG .25-1.5mm	.250 x .032	AA-5261	AA-5260	AA-2201	AA-2201X	AA-2261	AA-2260	AA-2220	AA-2220X
22-18 AWG .25-1.5mm	.187 x .020	AA-5267	AA-5266	AA-2202	AA-2202X			AA-2222	AA-2222X
22-18 AWG .25-1.5mm	.187 x .032	AA-5271		AA-2203	AA-2203X			AA-2223	AA-2223X
22-18 AWG .25-1.5mm	.110 x .020	AA-5275		AA-2204	AA-2204X				
22-18 AWG .25-1.5mm	.110 x .032	AA-5279		AA-2205	AA-2205X				
16-14 AWG 1.0-2.5mm	.250 x .032	BB-5263	BB-5262	BB-2206	BB-2206X	BB-2263	BB-2262	BB-2221	BB -2221X
16-14 AWG 1.0-2.5mm	.187 x .032	BB-5269	BB-5268	BB-2207	BB-2207X			BB-2224	BB -2224X
16-14 AWG 1.0-2.5mm	.187 x .032	BB-5273		BB-2208	BB-2208X			BB-2225	BB -2225X
16-14 AWG 1.0-2.5mm	.110 x .020	BB-5277							
16-14 AWG 1.0-2.5mm	.110 x .032	BB-5281							
12-10 AWG 4.0-6.0mm	.250 x .032	C-5265	C-5264		C-2265	C-2265	C-2264		

Note: For terminals on Mylar Tape, add "T" at the end of the loose piece part number.

Flag Quick Disconnects



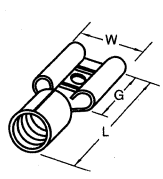


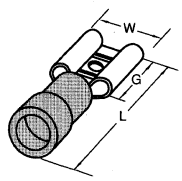
		KRIMPTITE®		VIBRAKRIMP®	
Wire Size	Tab Size	Loose Piece P/N	Metal Strip P/N	Loose Piece P/N	Metal Strip P/N
22-18 AWG (0,25-1,3)	.250 x .032	AA-1158	AAZ-1158	AA-4168	AAZ-4168
22-18 AWG (0,25-1,3)	.187 x .032	AA-1147-032	AAZ-1147-032	AA-4170-032	AAZ-4170-032
22-18 AWG (0,25-1,3)	.187 x .020	AA-1147	AAZ-1147	AA-4170	AAZ-4170
16-14 AWG (1,0-2,6)	.250 x .032	BB-1159	BBZ-1159	BB-4169	BBZ-4169
16-14 AWG (1,0-2,6)	.187 x .032	BB-1148-032	BBZ-1148-032	BB-4171-032	BBZ-4171-032
16-14 AWG (1,0-2,6)	.187 x 020	BB-1148	BBZ-1148	BB-4171	BBZ-4171

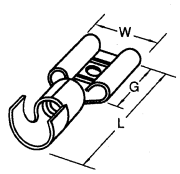
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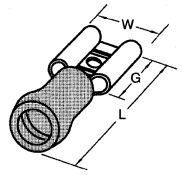
Tape-Fed and Loose Piece Female Quick Disconnect

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Tab Size	Wire Range		Common Dimensions		KRIMPTITE® Butted Seam		INSULKRIMP® PVC Insulated			VIBRAKRIMP® Butted Seam w/ Vibration Support			AVIKRIMP® Nylon Insulated w/ Vibration Support		
	AWG	mm²	Max. Width W	Grip G	Max. Length L	Part Number	Max. Wire Insulation Diameter	Max. Length L	Part Number	Max. Wire Insulation Diameter	Max. Length L	Part Number	Max. Wire Insulation Diameter	Max. Length L	Part Number
.250 x .032 (6,3 x 0,8)	22-18	(0,25-1,3)	.301 (7,6)	.310 (7,9)	.658 (16,7)	AA-1140	.135 (3,4)	.865 (22,0)	AA-2140	.060/.125 (1,5/3,2)	.802 (20,4)	AA-4176	.115 (2,9)	.865 (22,0)	AA-8140
	16-14	(1,0-2,6)	.301 (7,6)	.310 (7,9)	.658 (16,7)	BB-1141	.145 (3,7)	.865 (22,0)	BB-2141	.085/.145 (2,1/3,7)	.802 (20,4)	BB-4177	.138 (3,5)	.865 (22,0)	BB-8141
	14-12	(1,65-4,2)	.301 (7,6)	.310 (7,9)	.658 (16,7)	P-1142	.175(4,4)	.865 (22,0)	P-2142	.100/.175 (2,5/4,4)	.802 (20,4)	P-4178	.170 (4,3)	.865 (22,0)	P-8142
	12-10	(2,6-6,6)	.305 (7,7)	.310 (7,9)	.700 (17,8)	C-1143	.250 (6,4)	1.011 (25,7)	C-2143				.225 (5,7)	1.011 (25,7)	C-8143
.187 x .032 (4,7 x 0,8)	26-24	(0,1-0,3)	.238 (6,0)	.250 (6,3)	.550 (13,9)	M-1136-032				.040/.095 (1,0/2,4)	.690 (17,5)	M-4172-032	.072 (1,8)	.694 (17,6)	M-8136-032
	22-18	(0,25-1,3)	.238 (6,0)	.250 (6,3)	.573 (14,6)	AA-1137-032	.135 (3,4)	.789 (20,0)	AA-2137-032	.060/.125 (1,5/3,2)	.717 (18,2)	AA-4173-032	.115 (2,9)	.789 (20,0)	AA-8137-032
	16-14	(1,0-2,6)	.238 (6,0)	.250 (6,3)	.573 (14,6)	BB-1138-032	.145 (3,7)	.789 (20,0)	BB-2138-032	.085/.145 (2,2/3,7)	.717 (18,2)	BB-4174-032	.138 (3,5)	.789 (20,0)	BB-8138-032
	14-12	(1,65-4,2)	.238 (6,0)	.250 (6,3)	.573 (14,6)	P-1139-032	.175 (4,4)	.789 (20,0)	P-2139-032	.100/.175 (2,5/4,4)	.717 (18,2)	P-4175-032	.170 (4,3)	.789 (20,0)	P-8139-032
.187 x .020 (4,7 x 0,5)	26-24	(0,1-0,3)	.238 (6,0)	.250 (6,3)	.550 (13,9)	M-1136				.040/.095 (1,0/2,4)	.690 (17,5)	M-4172	.072 (1,8)	.694 (17,6)	M-8136
	22-18	(0,25-1,3)	.238 (6,0)	.250 (6,3)	.573 (14,6)	AA-1137	.135 (3,4)	.789 (20,0)	AA-2137	.060/.125 (1,5/3,2)	.717 (18,2)	AA-4173	.115 (2,9)	.789 (20,0)	AA-8137
	16-14	(1,0-2,6)	.238 (6,0)	.250 (6,3)	.573 (14,6)	BB-1138	.145 (3,7)	.789 (20,0)	BB-2138	.085/.145 (2,2/3,7)	.717 (18,2)	BB-4174	.138 (3,5)	.789 (20,0)	BB-8138
	14-12	(1,65-4,2)	.238 (6,0)	.250 (6,3)	.573 (14,6)	P-1139	.175 (4,4)	.789 (20,0)	P-2139	.100/.175 (2,5/4,4)	.717 (18,2)	P-4175	.170 (4,3)	.789 (20,0)	P-8139
.110 x .032 (2,8 x 0,8)	26-24	(0,1-0,3)	.163 (4,1)	.250 (6,3)	.535 (13,5)	M-1133				.040/.095 (1,0/2,4)	.690 (17,5)	M-4179-032	.072 (1,8)	.694 (17,6)	M-8133
	22-18	(0,25-1,3)	.163 (4,1)	.250 (6,3)	.573 (14,6)	AA-1134	.135 (3,4)	.789 (20,0)	AA-2134	.060/.125 (1,5/3,2)	.717 (18,2)	AA-4180-032	.115 (2,9)	.789 (20,0)	AA-8134
	16-14	(1,0-2,6)	.163 (4,1)	.250 (6,3)	.573 (14,6)	BB-1135	.145 (3,7)	.789 (20,0)	BB-2135	.085/.145 (2,2/3,7)	.717 (18,2)	BB-4181-032	.138 (3,5)	.789 (20,0)	BB-8135
.110 x .020 (2,8 x 0,5)	26-24	(0,1-0,3)	.163 (4,1)	.250 (6,3)	.535 (13,5)	M-1130				.040/.095 (1,0/2,4)	.690 (17,5)	M-4179	.072 (1,8)	.694 (17,6)	M-8130
	22-18	(0,25-1,3)	.163 (4,1)	.250 (6,3)	.573 (14,6)	AA-1131	.135 (3,4)	.789 (20,0)	AA-2131	.060/.125 (1,5/3,2)	.717 (18,2)	AA-4180	.115 (2,9)	.789 (20,0)	AA-8131
	16-14	(1,0-2,6)	.163 (4,1)	.250 6,3)	.573 (14,6)	BB-1132	.147 (3,7)	.789 (20,0)	BB-2132	.085/.145 (2,2/3,7)	.717 (18,2)	BB-4181	.138 (3,5)	.789 (20,0)	BB-8132

NOTE: For Terminals on Mylar Tape, add "T" at the end of loose piece Part Number.

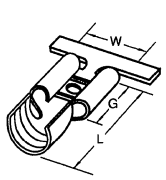
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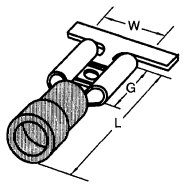
Metal Strip Quick Disconnect

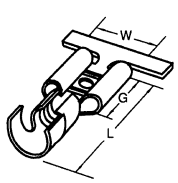
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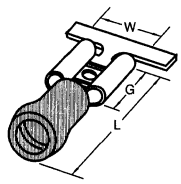
molex® ETC

Strip Receptacles







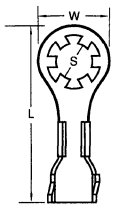


MATERIAL: BRASS

				KRIMPTITE® Open Barrel			INSULKRIMP® PVC Insulated			VIBRAKRIMP® Open Barrel w/ Vibration Support			AVIKRIMP® Nylon Insulated w/ Vibration Support			
Tab Size	Wire Range	Common Dimensions Max. Width W	Max. Grip G	Brass Length L	Tin-Plated Part Number	Max. Brass Part Number	Wire Insulation Diameter	Max. Length L	Tin-Plated Brass Part Number	Max. Wire Insulation Diameter	Max. Length L	Brass Part Number	Tin-Plated Brass Part Number	Max. Wire Insulation Diameter	Max. Length L	Tin-Plated Brass Part Number
250X.032 (6,3X0,8)	22-18 (0,25-1,3)	.301 (7,6)	.310 (7,9)	.658 (16,7)	AAZ-0163	AAZ-1163	.135 (3,4)	.865 (22,0)	AAZ-2140	.060/.125 (1,5/3,2)	.802 (20,4)	AAZ-0153	AAZ-4153	.115 (2,9)	.865 (22,0)	AAZ-8140
	16-14 (1,0-2,6)	.301 (7,6)	.310 (7,9)	.658 (16,7)	BBZ-0164	BBZ-1164	.145 (3,7)	.865 (22,0)	BBZ-2141	.085/.145 (2,1/3,7)	.802 (20,4)	BBZ-0154	BBZ-4154	.138 (3,5)	.865 (22,0)	BBZ-8141
	14-12 (1,65-4,2)	.301 (7,6)	.310 (7,9)	.658 (16,7)	PZ-0165	PZ-1165	.175 (4,4)	.865 (22,0)	PZ-2142	.100/.175 (2,5/4,4)	.802 (20,4)	PZ-0155	PZ-4155	.170 (4,3)	.865 (22,0)	PZ-8142
.187X.032 (4,7X0,8)	26-24 (0,1-0,3)	.238 (6,0)	.250 (6,3)	.550 (13,9)	MZ-0182-032	MZ-1182-032				.040/.095 (1,0/2,4)	.690 (17,5)	MZ-0149-032	MZ-4149-032	.072 (1,8)	.694 (17,6)	MZ-8136-032
	22-18 (0,25-1,3)	.238 (6,0)	.250 (6,3)	.573 (14,6)	AAZ-0160-032	AAZ-1160-032	.135 (3,4)	.789 (20,0)	AAZ-2137-032	.060/.125 (1,5/3,2)	.717 (18,2)	AAZ-0150-032	AAZ-4150-032	.115 (2,9)	.789 (20,0)	AAZ-8137-032
	16-14 (1,0-2,6)	.238 (6,0)	.250 (6,3)	.573 (14,6)	BBZ-0161-032	BBZ-1161-032	.145 (3,7)	.789 (20,0)	BBZ-2138-032	.085/.145 (2,2/3,7)	.717 (18,2)	BBZ-0151-032	BBZ-4151-032	.138 (3,5)	.789 (20,0)	BBZ-8138-032
	14-12 (1,65-4,2)	.238 (6,0)	.250 (6,3)	.573 (14,6)	PZ-0162-032	PZ-1162-032	.175 (4,4)	.789 (20,0)	PZ-2139-032	.100/.175 (2,5/4,4)	.717 (18,2)	PZ-0152-032	PZ-4152-032	.170 (4,3)	.789 (20,0)	PZ-8139-032
	26-24 (0,1-0,3)	.238 (6,0)	.250 (6,3)	.550 (13,9)	MZ-0182	MX-1182				.040/.095 (1,0/2,4)	.690 (17,5)	MZ-0149	MZ-4149	.072 (1,8)	.694 (17,6)	MZ-8136
.187X.020 (4,7X0,5)	22-18 (0,25-1,3)	.238 (6,0)	.250 (6,3)	.573 (14,6)	AAZ-0160	AAZ-1160	.135 (3,4)	.789 (20,0)	AAZ-2137	.060/.125 (1,5/3,2)	.717 (18,2)	AAZ-0150	AAZ-4150	.115 (2,9)	.789 (20,0)	AAZ-8137
	16-14 (1,0-2,6)	.238 (6,0)	.250 (6,3)	.573 (14,6)	BBZ-0161	BBZ-1161	.145 (3,7)	.789 (20,0)	BBZ-2138	.085/.145 (2,2/3,7)	.717 (18,2)	BBZ-0151	BBZ-4151	.138 (3,5)	.789 (20,0)	BBZ-8138
	14-12 (1,65-4,2)	.238 (6,0)	.250 (6,3)	.573 (14,6)	PZ-0162	PZ-1162	.175 (4,4)	.789 (20,0)	PZ-2139	.100/.175 (2,5/4,4)	.717 (18,2)	PZ-0152	PZ-4152	.170 (4,3)	.789 (20,0)	PZ-8139
.110X.032 (2,8X0,8)	26-24 (0,1-0,3)	.163 (4,1)	.250 (6,3)	.535 (13,5)	MZ-0183-032	MZ-1183-032				.040/.095 (1,0/2,4)	.690 (17,5)	MZ-0186-032	MZ-4186-032	.072 (1,8)	.694 (17,6)	MZ-8133
	22-18 (0,25-1,3)	.163 (4,1)	.250 (6,3)	.573 (14,6)	AAZ-0184-032	AAZ-1184-032	.135 (3,4)	.789 (20,0)	AAZ-2134	.060/.125 (1,5/3,2)	.717 (18,2)	AAZ-0187-032	AAZ-4187-032	.115 (2,9)	.789 (20,0)	AAZ-8134
	16-14 (1,0-2,6)	.163 (4,1)	.250 (6,3)	.573 (14,6)	BBZ-0185-032	BBZ-1185-032	.145 (3,7)	.789 (20,0)	BBZ-2135	.085/.145 (2,2/3,7)	.717 (18,2)	BBZ-0188-032	BBZ-4188-032	.138 (3,5)	.789 (20,0)	BBZ-8135
.110X.020 (2,8X0,5)	26-24 (0,1-0,3)	.163 (4,1)	.250 (6,3)	.535 (13,5)	MZ-0183	MZ-1183				.040/.095 (1,0/2,4)	.690 (17,5)	MZ-0186	MZ-4186	.072 (1,8)	.694 (17,6)	MZ-8130
	22-18 (0,25-1,3)	.163 (4,1)	.250 (6,3)	.573 (14,6)	AAZ-0184	AAZ-1184	.135 (3,4)	.789 (20,0)	AAZ-2131	.060/.125 (1,5/3,2)	.717 (18,2)	AAZ-0187	AAZ-4187	.115 (2,9)	.789 (20,0)	AAZ-8131
	16-14 (1,0-2,6)	.163 (4,1)	.250 (6,3)	.573 (14,6)	BBZ-0185	BBZ-1185	.147 (3,7)	.789 (20,0)	BBZ-2132	.085/.145 (2,2/3,7)	.717 (18,2)	BBZ-0188	BBZ-4188	.138 (3,5)	.789 (20,0)	BBZ-8132

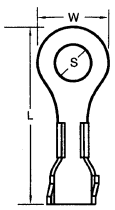
Note: For terminals on Mylar Tape, add "T" at the end of the loose piece part number.

Metal Strip Open Barrel Star Rings w/Vibration Support



Material	Part#	Wire Size	Stud Size S	Max. Width W	Min. Clearance C	Max. Length L
Brass	SRZ-0129-06	18-14	6	.385	.275	.949
Brass	SRZ-0129-08	18-14	8	.385	.275	.949
Brass	SRZ-0129-10	18-14	10	.385	.275	.949
Tin Plated Brass	SRZ-4129-06	18-14	6	.385	.275	.949
Tin Plated Brass	SRZ-4129-08	18-14	8	.385	.275	.949
Tin Plated Brass	SRZ-4129-10	18-14	10	.385	.275	.949
Tin Plated Steel	SRZ-S-4129-06	18-14	6	.385	.275	.949
Tin Plated Steel	SRZ-S-4129-08	18-14	8	.385	.275	.949
Tin Plated Steel	SRZ-S-4129-10	18-14	10	.385	.275	.949
Tin Plated Steel	SPL-0189	24	10	.480	.386	965

Metal Strip Open Barrel Rings w/Vibration Support



Material	Part#	Wire Size	Stud Size S	Max. Width W	Min. Clearance C	Max. Length L
Brass	RZ-0129-06	18-14	6	.385	.275	.949
Brass	RZ-0129-08	18-14	8	.385	.275	.949
Brass	RZ-0129-10	18-14	10	.385	.275	.949
Tin Plated Brass	RZ-4129-06	18-14	6	.385	.275	.949
Tin Plated Brass	RZ-4129-08	18-14	8	.385	.275	.949
Tin Plated Brass	RZ-4129-10	18-14	10	.385	.275	.949
Tin Plated Steel	RZ-S-4129-06	18-14	6	.385	.275	.949
Tin Plated Steel	RZ-S-4129-08	18-14	8	.385	.275	.949
Tin Plated Steel	RZ-S-4129-10	18-14	10	.385	.275	.949

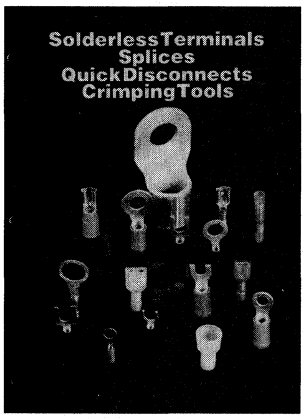
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Special Products

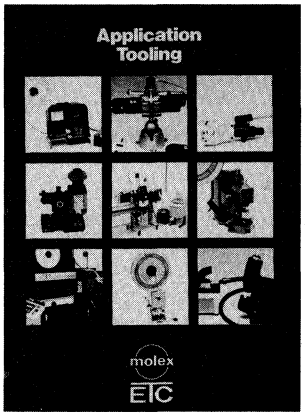
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Ext 206

Catalogs

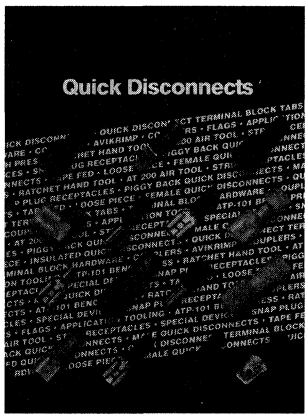
Molex-ETC offers a wide selection of precision engineered terminals, quick disconnects and splices, along with application tooling and other wiring accessories. *If you would like to receive any of the catalogs shown below, please call 1-800-800-0364, ext. 206.*



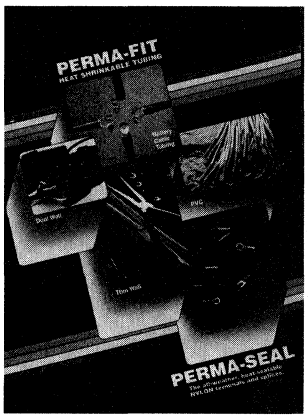
FULL LINE CATALOG
Call us and request your copy of our complete solderless terminal and wire accessory catalog.



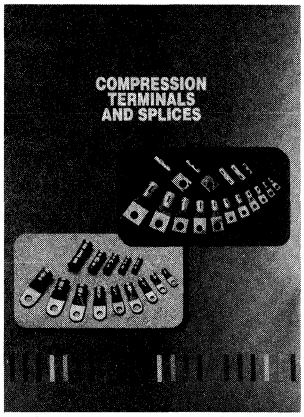
APPLICATION TOOLING BROCHURE
Molex-ETC offers a complete line of application tooling from hand tools to electric crimping presses.



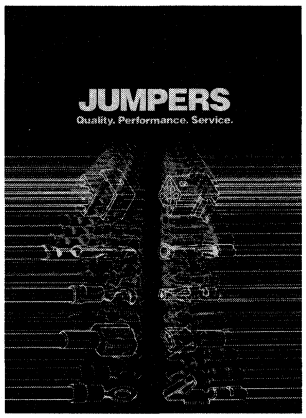
QUICK DISCONNECT BROCHURE
We offer the most complete line of non-insulated, and fully insulated quick disconnects.



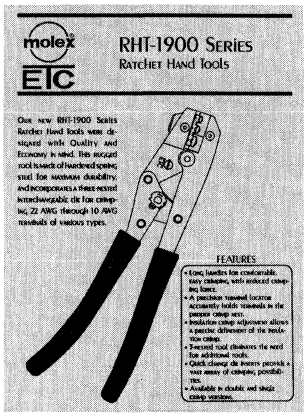
SHRINK TUBING FOLDER
Shrink tubing on bulk reels, standard lengths, or custom cut, with marking available.



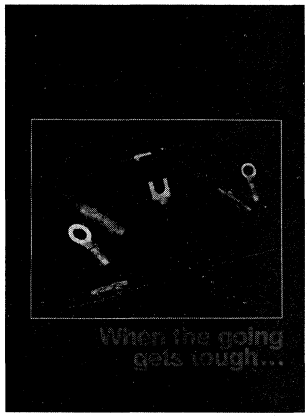
COMPRESSION LUG FOLDER
Industry standard terminals and splices that are tough and reliable, yet affordable.



JUMPER BROCHURE
Custom jumpers, assemblies, and battery cables.



RHT-1900 DATA SHEET
Try our new 3-nested ratchet hand tool with interchangeable crimping dies.



PERMA SEAL BROCHURE
Perma-Seal, the all-weather, heat-sealable nylon terminals and splices from Molex-ETC.

N

Molex-ETC Inc.
4650 62nd Avenue North Pinellas Park, Florida 34665
813-521-2700 Fax 813-528-1010

Quick Connects

Available Primarily in Europe

Contents

Female Receptacles

For 2,8 x 0,5mm Tabs 12N
For 2,8 x 0,8mm Tabs 13N
For 4,8 x 0,5mm Tabs 14N
For 4,8 x 0,8mm Tabs 15N
For 6,3 x 0.8mm Tabs 16N
For 9,5 x 1,2mm Tabs 17N
Flag Receptacle for 6,3 x 0,8mm Tabs 18N
Piggy Back for 6,3 x 0,8mm Tabs 19N

Tabs

6,3 x 0,8mm 20N-21N

Quick Snaps

Receptacles for 6,3 x 0,8mm Tabs 22N
Flag Receptacles for 7,7 x 0,8mm Tabs 23N
Tab for Use in Multi-Contact Housings, 6,3 x 0,8mm 24N

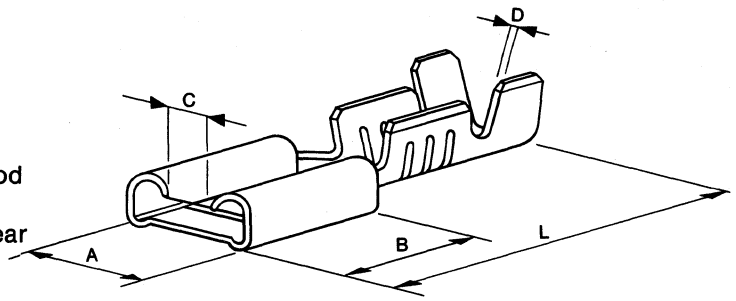
Quick Connect Female

Distributed by Molex Incorporated, not Molex-ETC

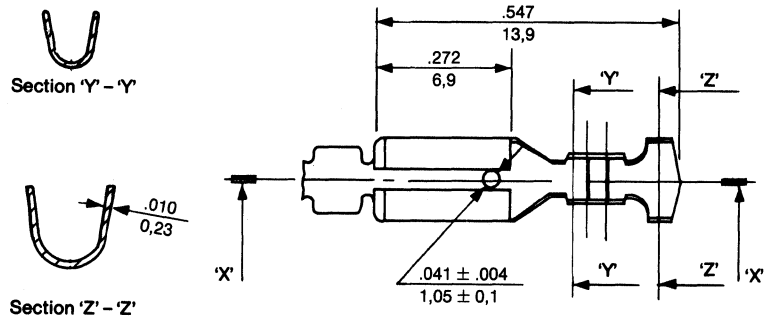
Receptacle

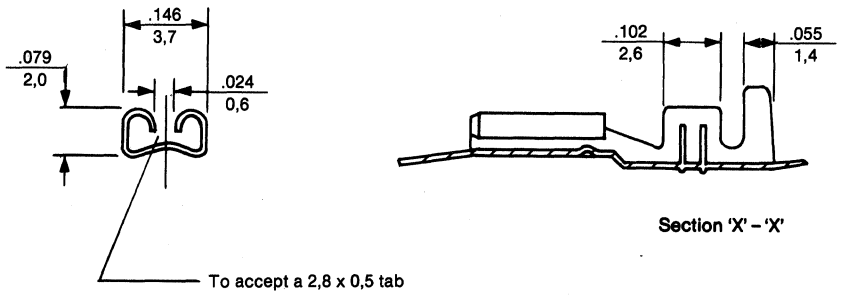
For 2,8 x 0,5 Tabs

- Wire range from 0,05 - 0,15mm² to 0,5 - 1,0mm²
- Insulation range from 0,7-1,5ϕmm to 2,7-3,3ϕmm
- The product is designed to achieve a quick method of electrical connection/disconnection
- The female receptacle has opening walls at the rear to prevent over insertion of corresponding tab



Available Primarily in Europe





N

Dimensions

Wire Size mm²	Ins. Range ϕ mm	Dimensions				
		A	B	C	D	L
0,5 -1,0	2,0-3,3	.146 3,7	.272 6,9	.024 0,6	.010 0,25	0.547 13,9
0,25-0,5	1,0-2,0	.146 3,7	.272 6,9	.024 0,6	.010 0,25	0.547 13,9
0,05-0,15	0,7-1,5	.146 3,7	.272 6,9	.024 0,6	.010 0,25	0.547 13,9

Ordering Information

Wire Size mm²	Ins. Range ϕ mm	Order Nos.					
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
0,5 -1,0	2,0-3,3	94030-4920	94030-4921	Contact Factory			
0,25-0,5	1,0-2,0	94030-4170	94030-4171				
0,05-0,15	0,7-1,5	94030-4940	94030-4941				

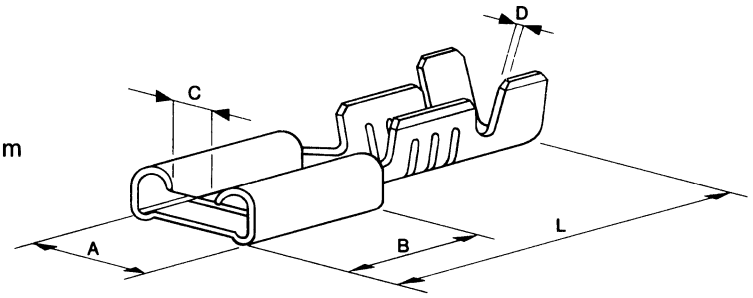
Quick Connect Female

Distributed by Molex Incorporated, not Molex-ETC

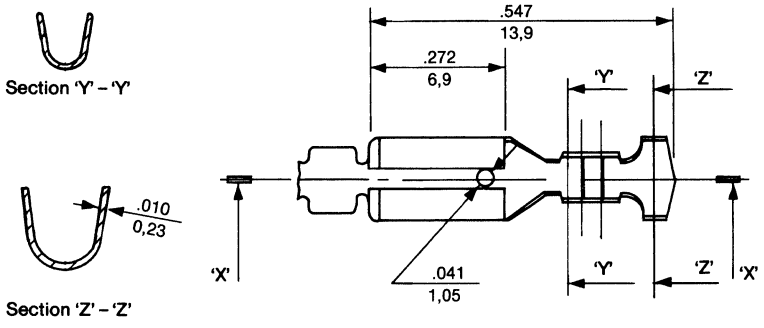
Receptacle

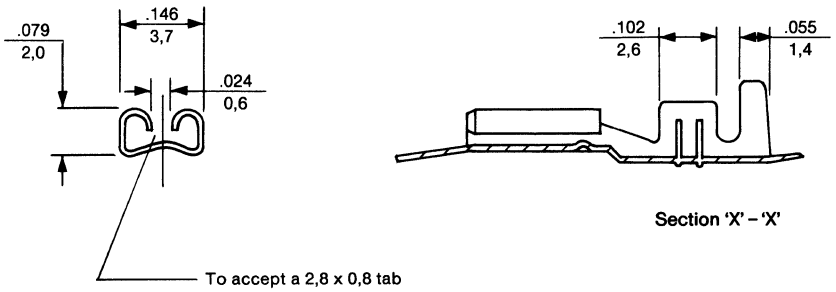
For 2,8 x 0,8 Tabs

- Wire sizes from 0,5-1,0mm² to 1,0-2,5mm²
- Insulation range from 2,0-3,3ϕmm to 2,7-4,3ϕmm



Available Primarily in Europe





N

Dimensions

Wire Size mm²	Ins. Range ϕ mm	Dimensions				
		A	B	C	D	L
0,5 -1,0	2,0-3,3	.146 3,7	.272 6,9	.024 0,6	.010 0,25	.547 13,9
0,25-0,5	1,0-2,0	.146 3,7	.272 6,9	.024 0,6	.010 0,25	.547 13,9

Ordering Information

Wire Size mm²	Ins. Range ϕ mm	Order Nos.					
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
0,5 -1,0	2,0-3,3	94030-4930	94030-4931	Contact Factory			
0,25-0,5	1,0-2,0	94030-4200	94030-4201				

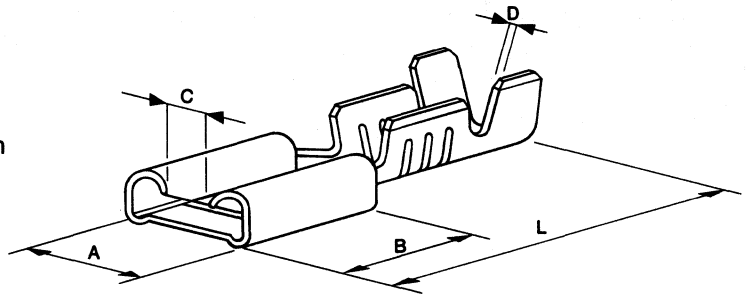
Quick Connect Female

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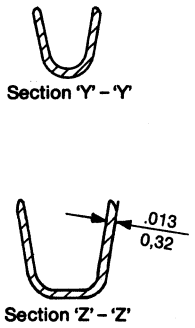
Receptacle

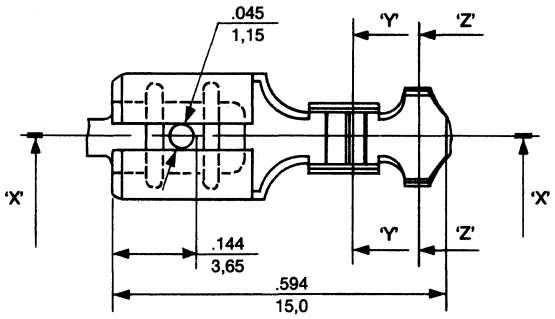
For 4,8 x 0,5 Tabs

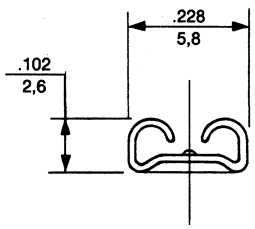
- Wire range from 0,5-1,0mm² to 1,0-2,5mm²
- Insulation range from 2,0-3,3ϕmm to 2,7-4,3ϕmm

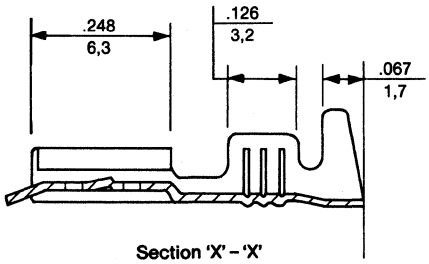


Available Primarily in Europe









N

Dimensions

Wire Size mm²	Ins. Range ϕ mm	Dimensions				
		A	B	C	D	L
0,5 -1,0	2,0-3,3	.228 5,8	.248 6,3	.047 1,2	.013 0,32	.591 15,0
0,5 -1,0	1,3-2,3	.228 5,8	.248 6,3	.047 1,2	.013 0,32	.591 15,0
1,0-2,5	2,7-4,3	.146 5,8	.228 6,3	.248 1,2	.047 0,32	.013 15,0
1,0-2,5	1,7-2,9	.228 5,8	.248 6,3	.047 1,2	.013 0,32	.591 15,0

Ordering Information

Wire Size mm²	Ins. Range ϕ mm	Order Nos.					
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
0,5-1,0	2,0-3,3	94030-4530	94030-4531	Contact Factory			
1,0-2,5	2,7-4,3	94030-4540	94030-4541				

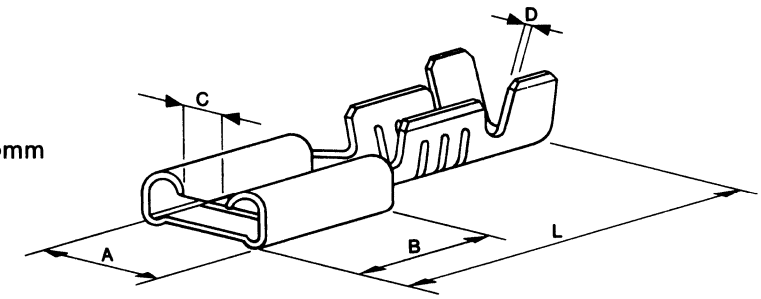
Quick Connect Female

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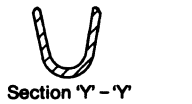
Receptacle

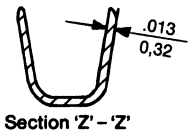
For 4,8 x 0,8 Tabs

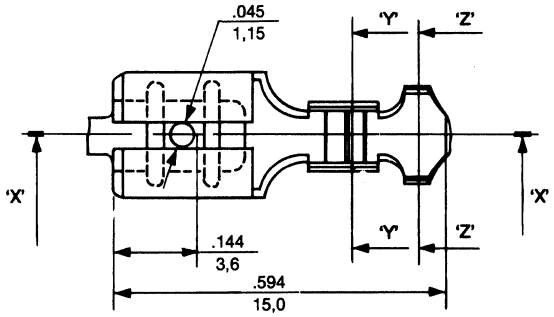
- Wire sizes from 0,5-1,0mm² to 1,0-2,5mm²
- Insulation ranges from 2,0-3,3ϕmm to 2,7-4,3ϕmm

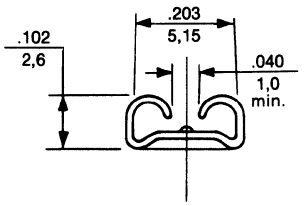


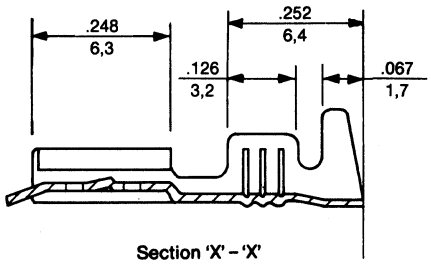
Available Primarily in Europe











N

Dimensions

Wire Size mm²	Ins. Range ϕ mm	Dimensions				
		A	B	C	D	L
0,5-1,0	2,0-3,3	.203 5,15	.248 6,3	.047 1,2	.013 0,32	.591 15,0
1,0-2,5	2,7-4,3	.203 5,15	.248 6,3	.047 1,2	.013 0,32	.591 15,0

Ordering Information

Wire Size mm²	Ins. Range ϕ mm	Order Nos.					
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
0,5-1,0	2,0-3,3	94030-4020	94030-4021	Contact Factory			
1,0-2,5	2,7-4,3	94030-4030	94030-4031				

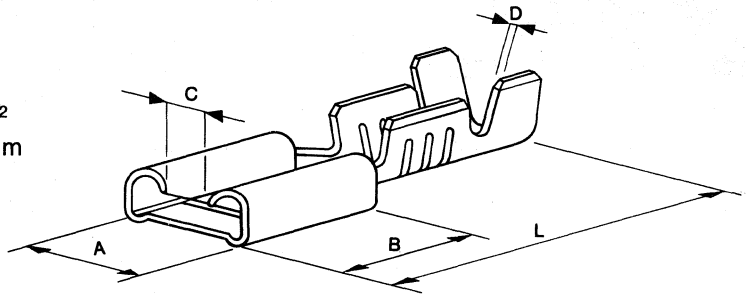
Quick Connect Female

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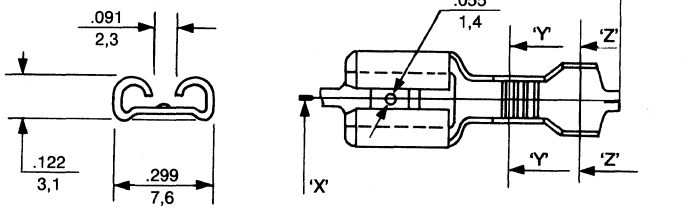
Receptacle

For 6,3 x 0,8 Tabs

- Wire sizes range from 0,5-1,0mm² to 4,0-6,0mm²
- Insulation range from 2,0-3,3ϕmm to 3,8-5,1ϕmm



Available Primarily in Europe

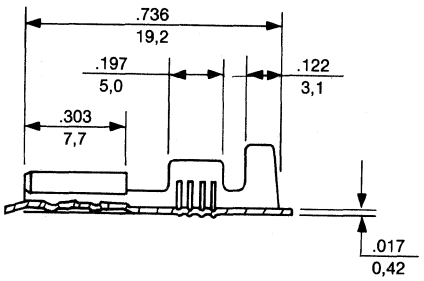




Section 'Y' – 'Y'



Section 'Z' – 'Z'



Section 'X' – 'X'

N

Dimensions

Wire Size mm²	Ins. Range ϕ mm	Dimensions				
		A	B	C	D	L
0,5-1,0	2,0-3,3	.299 7,6	.303 7,7	.091 2,3	.017 0,42	.756 19,2
1,0-2,5	2,7-4,3	.299 7,6	.303 7,7	.091 2,3	.017 0,42	.756 19,2
4,0-6,0	3,8-5,1	.299 7,6	.303 7,7	.091 2,3	.017 0,42	.756 19,2

Ordering Information

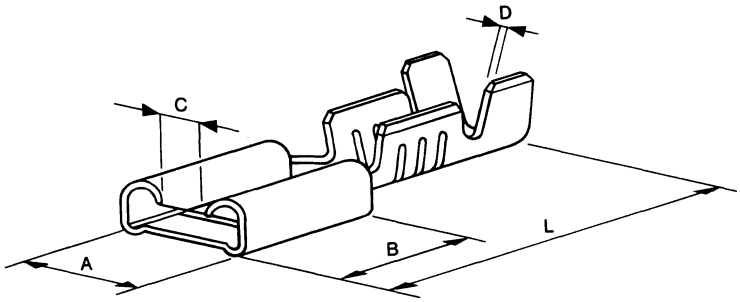
Wire Size mm²	Ins. Range ϕ mm	Order Nos.					
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
0,5-1,0	2,0-3,3	94030-3770	94030-3771	94030-3772	94030-3773	Contact Factory	
1,0-2,5	2,7-4,3	94030-3780	94030-3781	94030-3782	94030-3783		
4,0-6,0	3,8-5,1	94030-3940	94030-3941	94030-3942	94030-3943		

Quick Connect Female

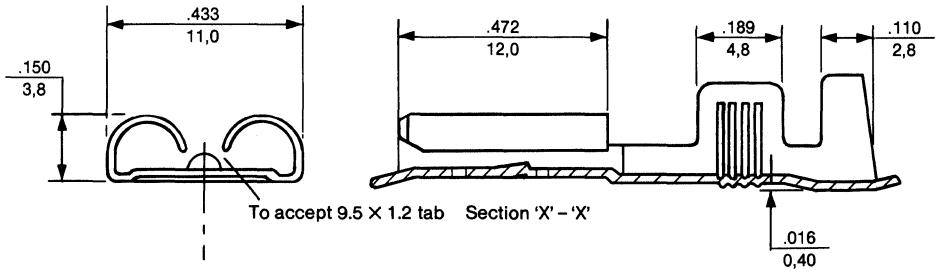
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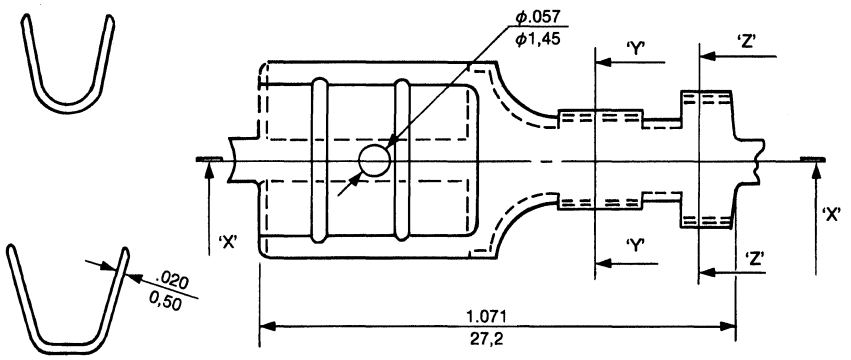
Receptacle
For 9,5 x 1,2 Tabs

- □ Wire range 4,0-6,0mm²
- □ Insulation range 4,0-5,1ϕmm



Available Primarily in Europe





N

Dimensions

Wire Size mm²	Ins. Range ϕ mm	Dimensions				
		A	B	C	D	L
4,0-6,0	4,0-5,1	.433 11,0	.472 12,0	.110 2,8	.020 0,50	1.071 27,2

Ordering Information

Wire Size mm²	Ins. Range ϕ mm	Order Nos.					
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
4,0-6,0	4,0-5,1	94030-4220	94030-4221	94030-4222	Contact Factory		

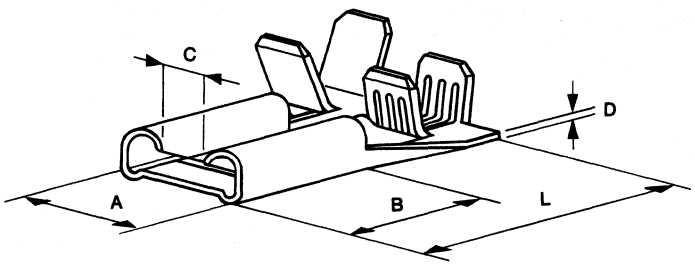
Quick Connect Flag

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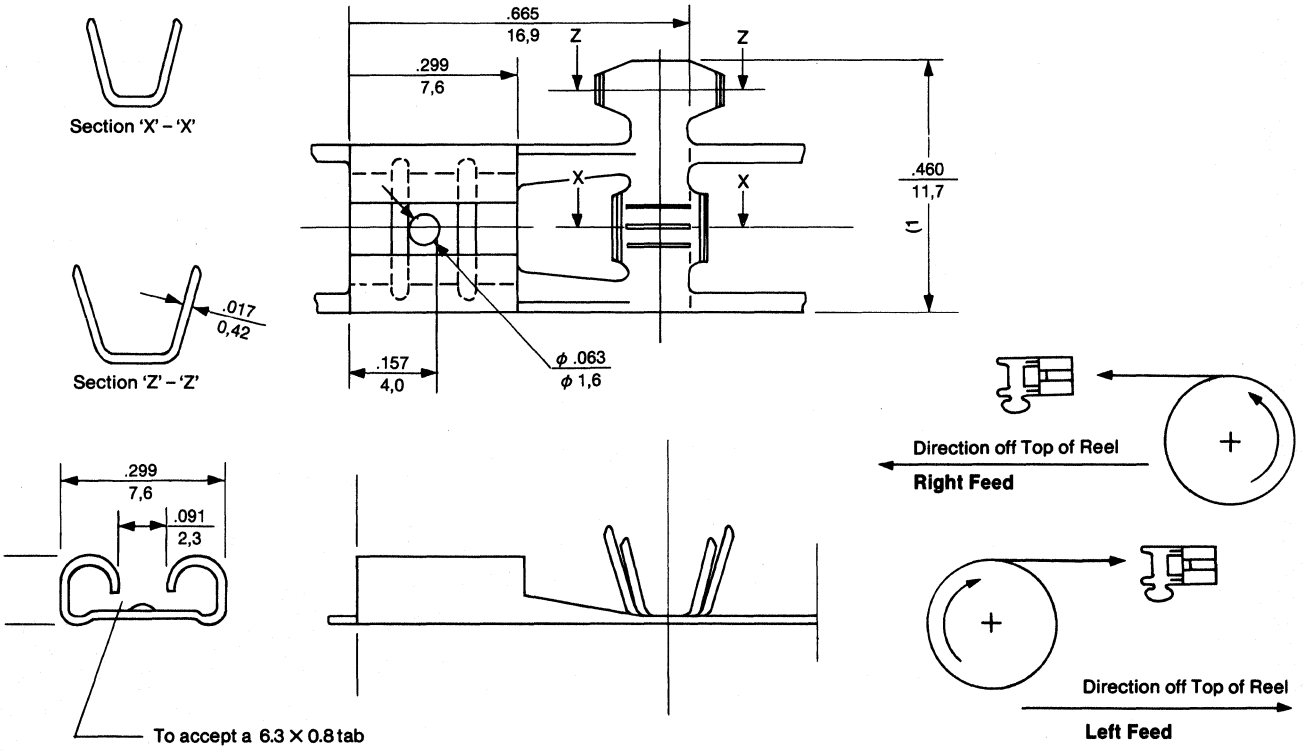
Flag Receptacle

For 6,3 x 0,8mm Tabs

- Wire range from 0,5-1,0mm² to 1,0-2,5mm²
- Insulation range from 2,0-3,3ϕmm to 2,7-4,3ϕmm
- The product is designed to overcome problems where space is a critical factor



Available Primarily in Europe



N

Dimensions

Wire Size mm²	Ins. Range ϕ mm	Dimensions				
		A	B	C	D	L
0,5 -1,0	2,0-3,3	.299 7,6	.303 7,7	.091 2,3	.017 0,42	.665 16,9
1,0 -2,5	2,7-4,3	.299 7,6	.303 7,7	.091 2,3	.017 0,42	.665 16,9

Ordering Information

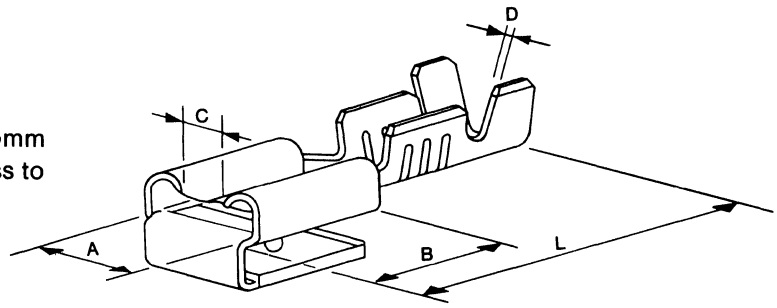
Wire Size mm²	Ins. Range ϕ mm		Order Nos.					
			Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
0,5-1,0	2,0-3,3	Left Feed	94030-5000	94030-5001			Contact Factory	
		Right Feed	94030-3970	94030-3971	94030-3972		Contact Factory	
1,0-2,5	2,7-4,3	Left Feed	94030-5010	94030-5011			Contact Factory	
		Right Feed	94030-3980	94030-3981	94030-3982		Contact Factory	

Quick Connect Piggy Back

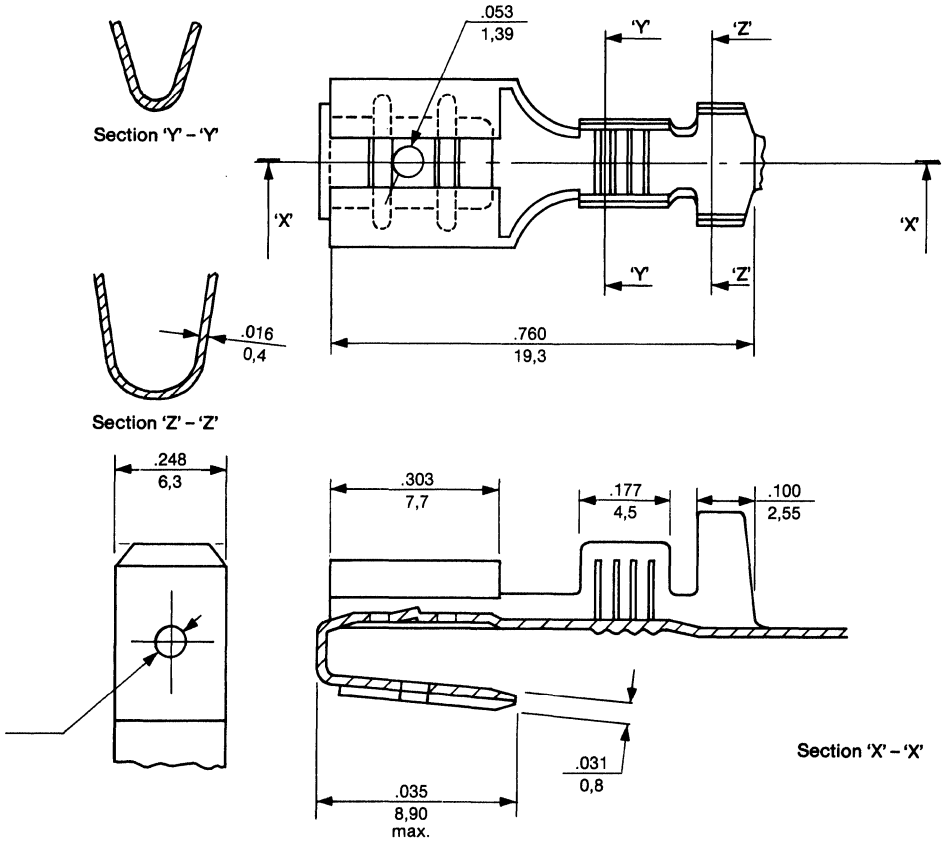
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Piggy Back
For 6,3 x 0,8mm Tabs

- Wire sizes from 0,5-1,0mm² to 4,0-6,0mm²
- Insulation ranges from 2,0-3,3ϕmm to 3,8-5,1ϕmm
- The design of the product provides easy access to tap an additional connection



Available Primarily in Europe



N

Dimensions

Wire Size mm²	Ins. Range ϕ mm	Dimensions				
		A	B	C	D	L
0,5-1,0	2,0-3,3	.299 7,6	.303 7,7	.091 2,3	.016 0,40	.760 19,3
1,0-2,5	2,7-4,3	.299 7,6	.303 7,7	.091 2,3	.016 0,40	.760 19,3
4,0-6,0	3,8-5,1	.299 7,6	.303 7,7	.091 2,3	.016 0,40	.760 19,3

Ordering Information

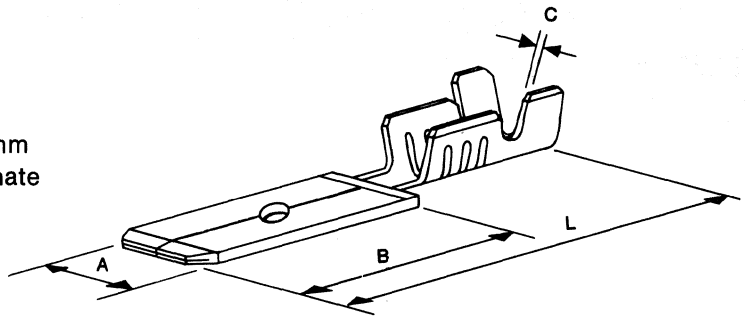
Wire Size mm²	Ins. Range ϕ mm	Order Nos.					
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
0,5-1,0	2,0-3,3	94030-3990	94030-3991	Contact Factory			
1,0-2,5	2,7-4,3	94030-4000	94030-4001				
4,0-6,0	3,8-5,1	94030-4010	94030-4011				

Quick Connect Tab

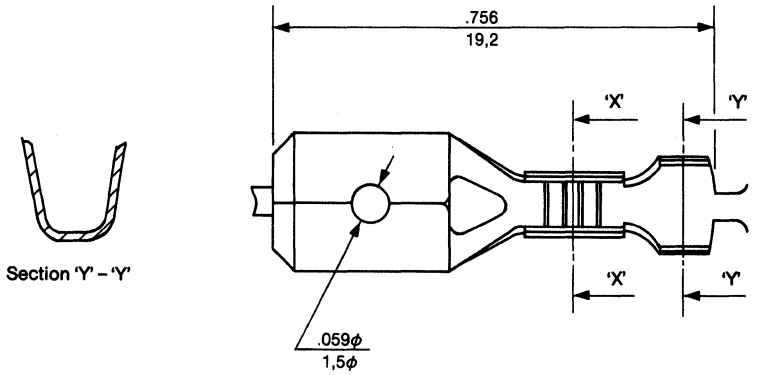
Distributed by Molex Incorporated, not Molex-ETC

Tab
6,3 x 0,8 mm

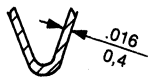
- Wire ranges from 0,5 - 1,0mm² to 4,0 - 6,0mm²
- Insulation ranges from 2,0-3,3ϕmm to 3,0-5,1ϕmm
- These are manufactured to a high standard to mate with our standard Qik Konnect Receptacles for optimum fit and performance



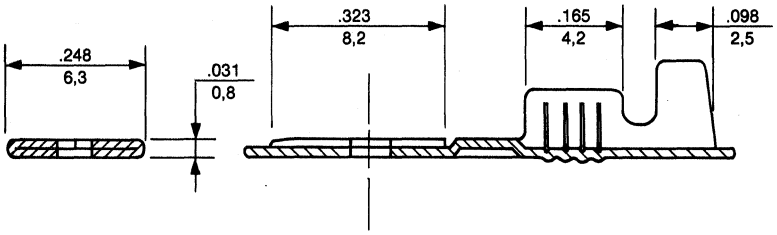
Available Primarily in Europe



Section 'Y' – 'Y'



Section 'X' – 'X'



N

Dimensions

Wire Size mm²	Ins. Range ϕ mm	Dimensions			
		A	B	C	L
0,5 -1,0	2,0-3,3	.248 6,3	.323 8,2	.016 0,4	.756 19,2
1,0 -2,5	2,7-4,3	.248 6,3	.323 8,2	.016 0,4	.756 19,2
4,0 -6,0	3,8-5,1	.248 6,3	.323 8,2	.016 0,4	.756 19,2

Ordering Information

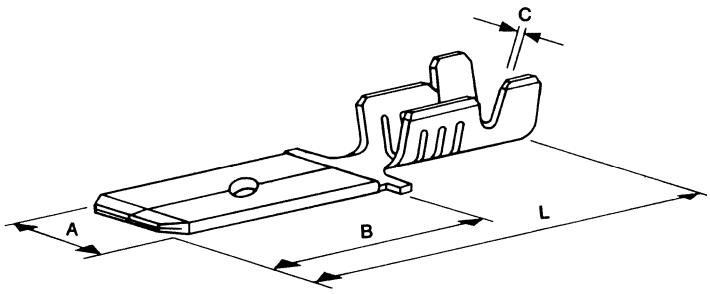
Wire Size mm²	Ins. Range ϕ mm	Order Nos.					
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
0,5-1,0	2,0-3,3	94030-4550	94030-4551	Contact Factory			
1,0-2,5	2,7-4,3	94030-4560	94030-4561				
4,0-6,0	3,8-1,5	94030-4570	94030-4571				

Quick Connect Tab

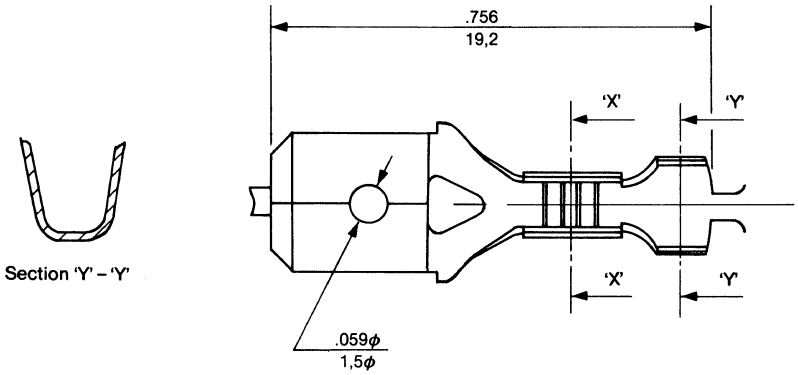
Distributed by Molex Incorporated, not Molex-ETC

Tab
6,3 x 0,8 mm

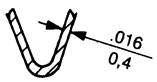
- □ Wire sizes from 0,5 - 1,0mm² to 4,0 - 6,0mm²
- □ Insulation ranges from 2,0-3,3ϕmm to 3,8-5,1ϕmm



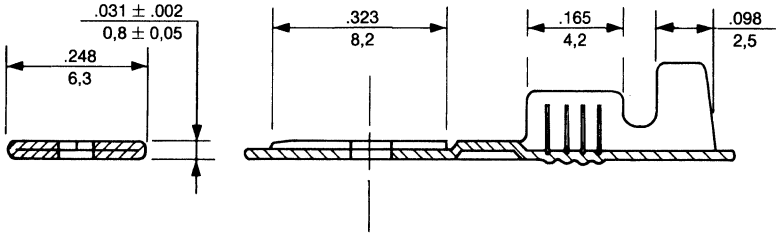
Available Primarily in Europe



Section 'Y' – 'Y'



Section 'X' – 'X'



N

Dimensions

Wire Size mm²	Ins. Range ϕ mm	Dimensions			
		A	B	C	L
0,5 -1,0	2,0-3,3	.264 6,7	.323 8,2	.016 0,4	.756 19,2
1,0 -2,5	2,7-4,3	.248 6,3	.323 8,2	.016 0,4	.756 19,2
4,0 -6,0	3,8-5,1	.248 6,3	.323 8,2	.016 0,4	.756 19,2

Ordering Information

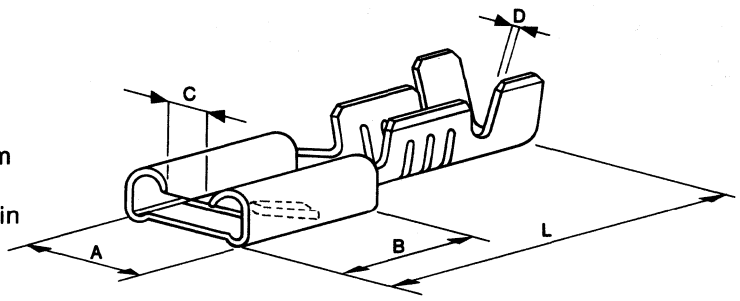
Wire Size mm²	Ins. Range ϕ mm	Order Nos.					
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
0,5-1,0	2,0-3,3	94030-4100	94030-4101	Contact Factory			
1,0-2,5	2,7-4,3	94030-4110	94030-4111				
4,0-6,0	3,8-1,5	94030-4120	94030-4121				

Quick Snap Female

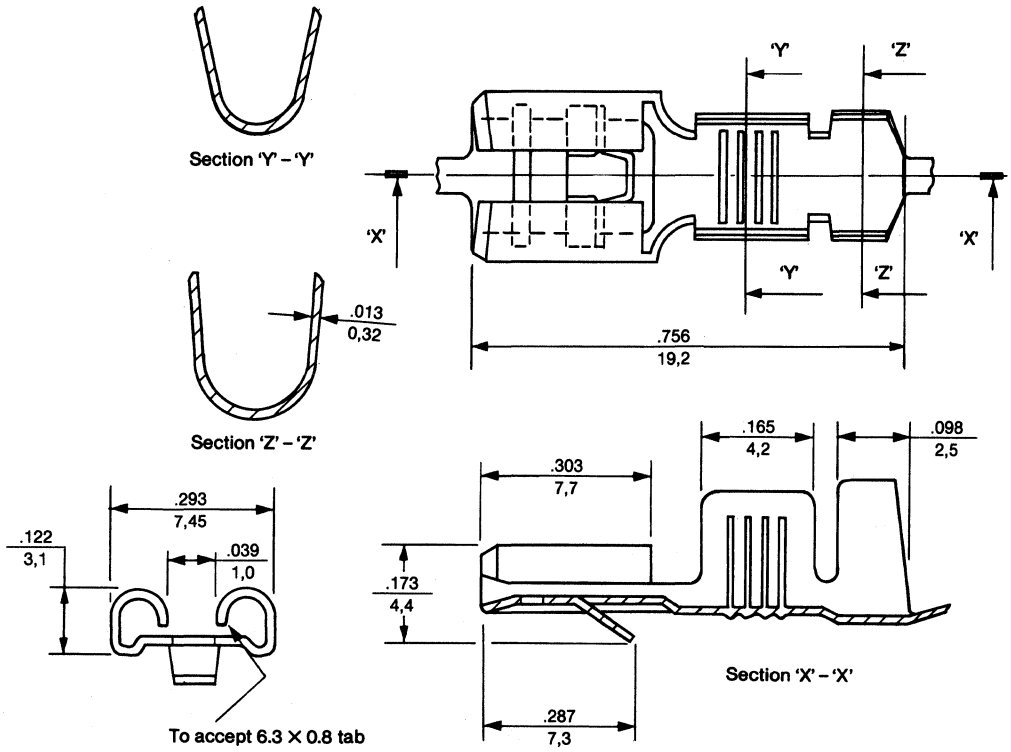
Snap Receptacle

For 6,3 x 0,8mm Tabs

- Wire ranges from 0,5-1,0mm² to 4,0-6,0mm²
- Insulation ranges from 2,0-3,3ϕmm to 3,8-5,1ϕmm
- This is the multi-way connector version of our standard Qik Konnect receptacle. Normally used in harness making. This provides a quick method of multi connections up to 18 ways



Available Primarily in Europe



N

Dimensions

Wire Size mm²	Ins. Range ϕ mm	Dimensions				
		A	B	C	D	L
0,5-1,0	2,0-3,3	.293 7,45	.303 7,7	.039 1,0	.013 0,32	.756 19,2
1,0-2,5	2,7-4,3	.293 7,45	.303 7,7	.039 1,0	.013 0,32	.756 19,2
4,0-6,0	3,8-5,1	.293 7,45	.303 7,7	.039 1,0	.013 0,32	.756 19,2

Ordering Information

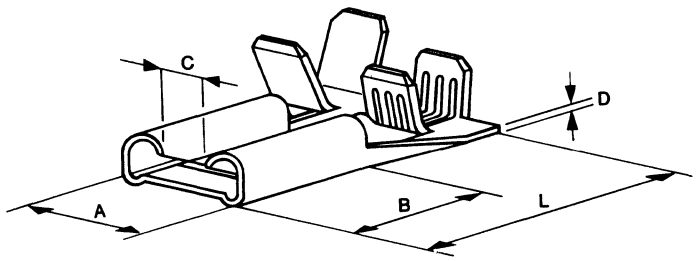
Wire Size mm²	Ins. Range ϕ mm	Order Nos.					
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
0,5-1,0	2,0-3,3	94030-3890	94030-3891			Contact Factory	
1,0-2,5	2,7-4,3	94030-3910	94030-3911	94030-3912	94030-3913		
4,0-6,0	3,8-5,1	94030-3960	94030-3961	94030-3962	94030-3963		

Quick Snap Flag

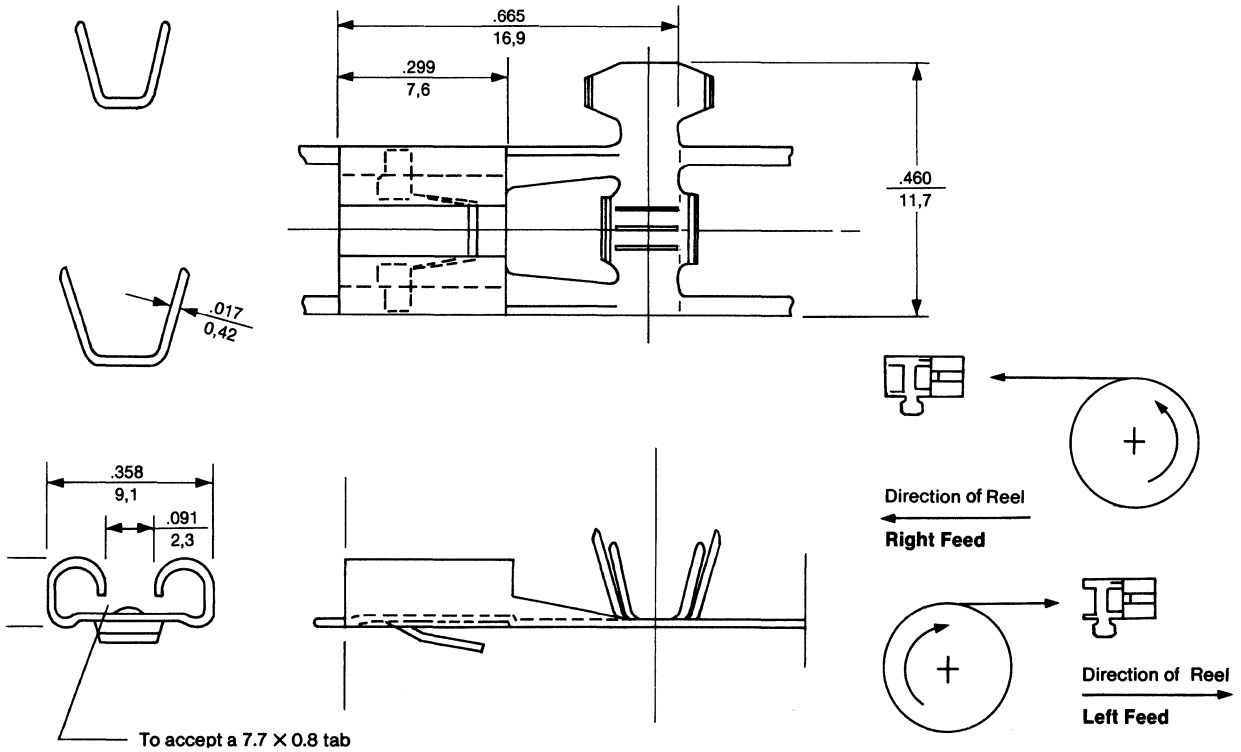
Distributed by Molex Incorporated, not Molex-ETC

Snap Flag Receptacle
For 7,7 x 0,8mm Tabs

- Wire range from 0,5-1,0mm² to 4,0-6,0mm²
- Insulation range from 2,0-3,3ϕmm to 3,8-5,1ϕmm
- This is the multi-way connector version of our Qik Konnect Flag receptacle. This provides a quick method of multi-connection up to 18 ways



Available Primarily In Europe



N

Dimensions

Wire Size mm²	Ins. Range ϕ mm	Dimensions				
		A	B	C	D	L
1,0-2,5	2,7-4,3	.358 9,1	.299 7,6	.091 2,3	.017 0,42	.665 16,9
4,0-6,0	3,8-5,1	.358 9,1	.299 7,6	.091 2,3	.017 0,42	.665 16,9

Ordering Information

Wire Size mm²	Ins. Range ϕ mm		Order Nos.					
			Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
1,0-2,5	2,7-4,3	Left Feed	94030-5920	94030-5921	94030-5922	Contact Factory		
		Right Feed	94030-5900	94030-5901	94030-5902			
4,0-6,0	3,8-5,1	Left Feed	94030-6010	94030-6011				
		Right Feed	94030-6000	94030-6001				

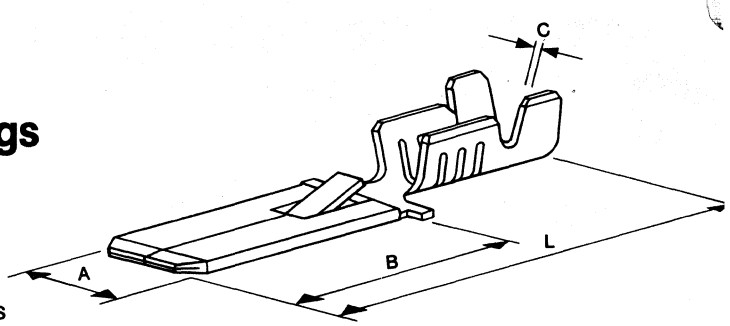
Quick Snap Tab

Distributed by Molex Incorporated, not Molex-ETC

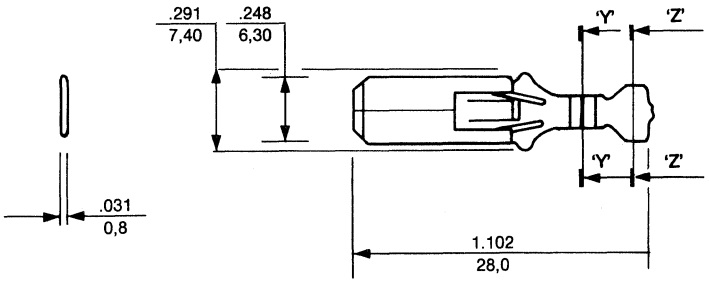
Snap Tab

6,3 x 0,8 mm with Latch
For use in Multi-Contact Housings

- Wire sizes from 0,5 - 1,0mm² to 4,0 - 6,0mm²
- Insulation ranges from 2,0-3,3ϕmm to 3,8-5,1ϕmm
- This is the multiway connector version of our standard Qik Konnect tab
- Normally used in harness manufacture. This provides a quick method of multi-connection up to 18 ways



Available Primarily in Europe

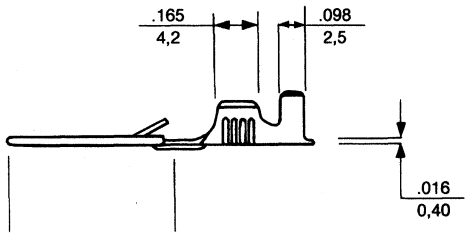




Section 'Y' – 'Y'



Section 'Z' – 'Z'



N

Dimensions

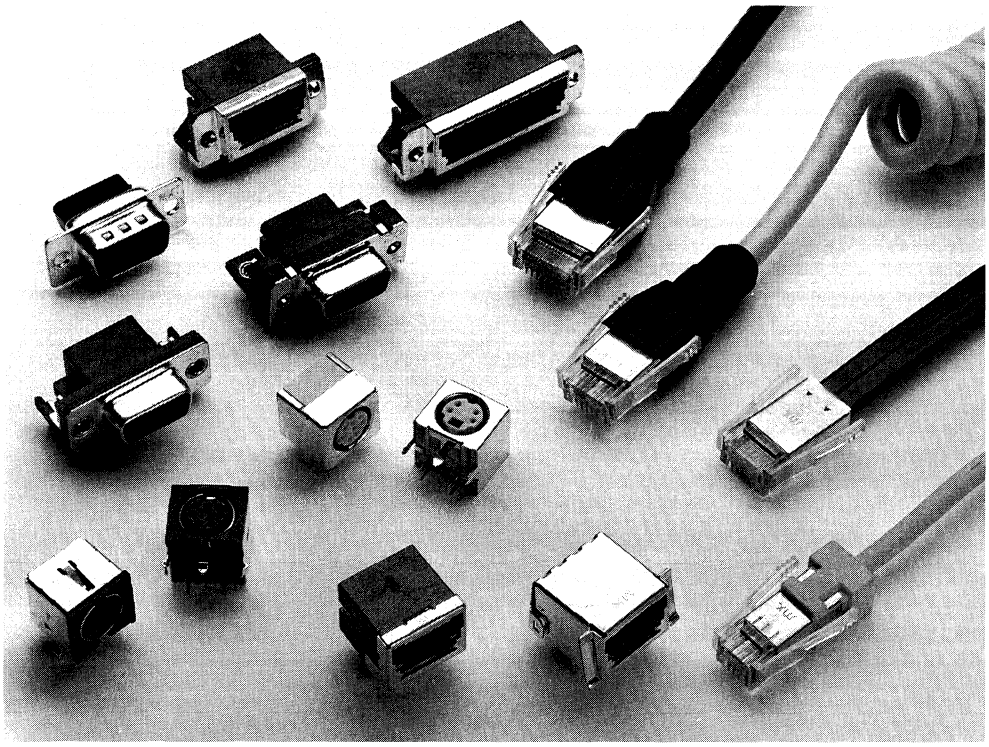
Wire Size mm²	Ins. Range ϕ mm	Dimensions			
		A	B	C	L
0,5 -1,0	2,0-3,3	.248 6,3	.618 15,7	.016 0,4	1.102 28,0
1,0 -2,5	2,7-4,3	.248 6,3	.618 15,7	.016 0,4	1.102 28,0
4,0 -6,0	3,8-5,1	.248 6,3	.618 15,7	.016 0,4	1.102 28,0

Ordering Information

Wire Size mm²	Ins. Range ϕ mm	Order Nos.					
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
0,5-1,0	2,0-3,3	94030-4070	94030-4071	94030-4072		Contact Factory	
1,0-2,5	2,7-4,3	94030-4080	94030-4081	94030-4082	94030-4083		
4,0-6,0	3,8-5,1	94030-4090	94030-4091				

Input/Output Connectors

Contents



SEMCONN™ Shielded Input/Output Connector System 2O-13O
SEMCONN™ ACCESS.bus* 14O-15O
Mini-DIN Receptacles 16O-17O
D-Subminiature Right Angle PCB Connectors 18O-19O
High Density D-Subminiature PCB Connectors 20O-21O
High Density D-Subminiature Connectors with Crimp Removable Contacts 22O-23O
D-Subminiature Connectors with Solder Cup Contacts 24O

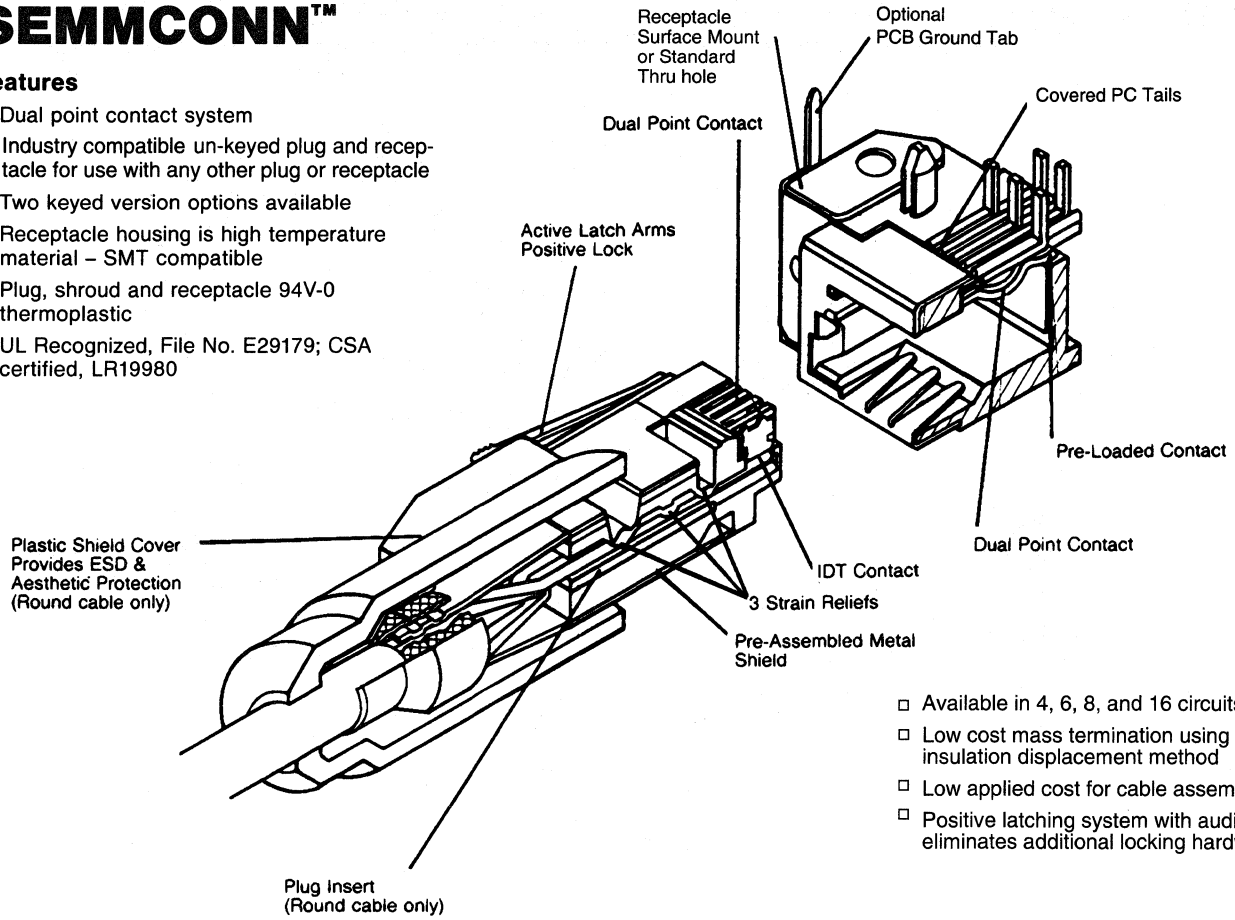
*ACCESS.bus is a registered trademark of Digital Equipment Corporation

Shielded I/O Connector System

SEMMCONN™

Features

- Dual point contact system
- Industry compatible un-keyed plug and receptacle for use with any other plug or receptacle
- Two keyed version options available
- Receptacle housing is high temperature material – SMT compatible
- Plug, shroud and receptacle 94V-0 thermoplastic
- UL Recognized, File No. E29179; CSA certified, LR19980



- Available in 4, 6, 8, and 16 circuits
- Low cost mass termination using insulation displacement method
- Low applied cost for cable assembly
- Positive latching system with audible "click" eliminates additional locking hardware

The patented two-piece Molex SEMCONN System is fully shielded for EMI/RFI for use in critical I/O applications.

Positive-locking plugs feature redundant **gold plated dual point contacts.** Made of clear or smoked gray polycarbonate and shielded with tin plated brass, the plugs are available to **terminate both flat and round shielded cables.**

Receptacles are available in right angle or vertical styles. Through-hole versions feature the **industry standard dual-row .050" x .100" footprint; the surface mount version has a single row .050" footprint.**

With the demand for higher density, rugged, user friendly I/O systems, SEMCONN replaces existing I/O connectors in keyboard, graphics tablets, modems, bar code readers, cellular phones, audio/video, and medical instrumentation.

Specifications

Housings — Plug and plug insert - clear thermoplastic 94V-0

Round cable shroud - black thermoplastic, 94V-0

Receptacle - black SMT compatible thermoplastic, 94V-0

Shields — Brass with tin-over-nickel plate

Contacts — Plug - Phosphor bronze with 50µ" select gold in contact area, tin/lead in insulation displacement section, both over nickel plate

Receptacle — Phosphor bronze with 50µ" select gold in contact area, tin/lead on solder tails, both over nickel plate

Wire — For use with #24-28 AWG foil shielded flat, round and retractile cable

Strength of Cable Strain Relief — 30 lbs. min.

Insertion/Extraction Force — 1.4 lbs/1.3 lbs. (8 ckt.)

Plug to Socket Latch Strength — 15 lb. min.

Operating Temperature — -20°C to 80°C

Durability — 500 cycles min.

Contact Normal Force — 100 grams min.

Rated Voltage, Current — 30 Vac at 1.5 amps

Contact Resistance — 10 milliohms max.

Electrostatic Discharge Protection — 20 kV min.

Dielectric Strength — 1000 Vac (rms)

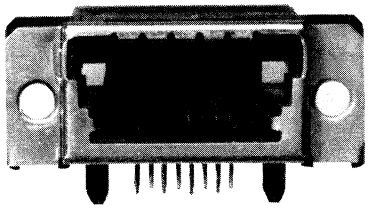
Insulation Resistance — 500 megohms min.

Shielding Effectiveness — 30 to 500 mHz - 20 dB min. 500 mHz to 1 gHz - 10 dB min.

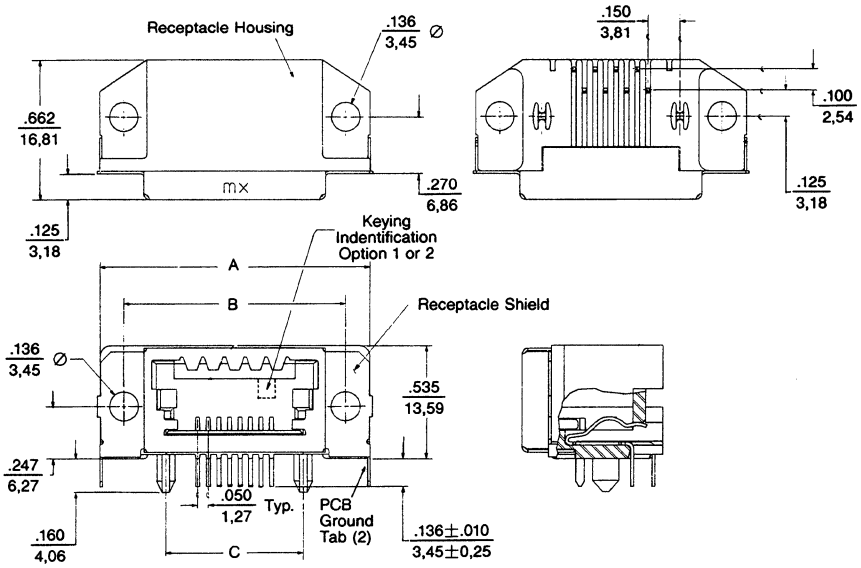
SEMCONN™ Shielded Receptacle

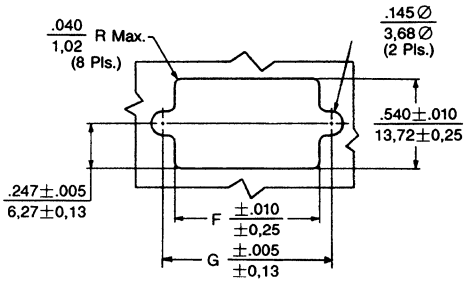
Right Angle Shielded Receptacle Assembly with PCB Ground Tab

- Pre-loaded contact assures low insertion force-to-normal force ratio
- Covered pc leads reduce contamination during soldering operation
- High temperature plastic housing - SMT compatible
- Molex Product Specification PS-71350A
- Application Specification PS-71355



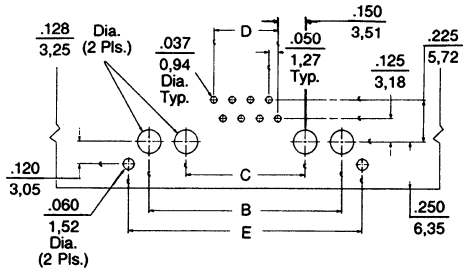
8 Ckt. Shown



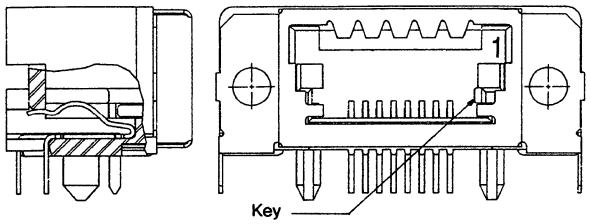


Panel Cut Out

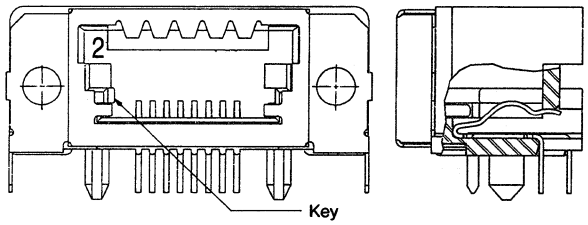
NOTE: Maximum Panel Thickness .250



Recommended P.C.B. Layout
Foil Side Shown



Keying Option 1



Keying Option 2

Ordering Information

Ckt. Size	NON-KEYED VERSION Order Number	KEYING OPTION 1 Order Number	KEYING OPTION 2 Order Number	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G
4	• 15-83-0304*	• 15-83-0334	• 15-83-0354	1.080 27,43	.850 21,59	.450 11,43	.150 3,81	1.073 27,25	.700 17,78	.850 21,59
6	• 15-83-0306*	• 15-83-0336	• 15-83-0356	1.180 29,97	.950 24,13	.550 13,97	.250 6,35	1.173 29,79	.800 20,32	.950 24,13
8	• 15-83-0308*	• 15-83-0338	• 15-83-0358	1.280 32,51	1.050 26,67	.650 16,51	.350 8,89	1.273 32,33	.900 22,86	1.050 26,67
16	• 15-83-0316*	• 15-83-0346	• 15-83-0366	1.680 42,67	1.450 36,83	1.050 26,67	.750 19,05	1.673 42,49	1.300 33,02	1.450 36,83

*Industry compatible

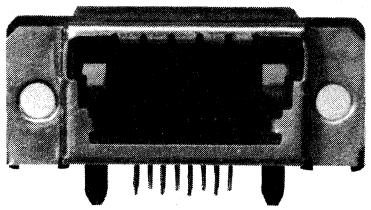
• U.S. Standard Product, available through Molex franchised distributors.

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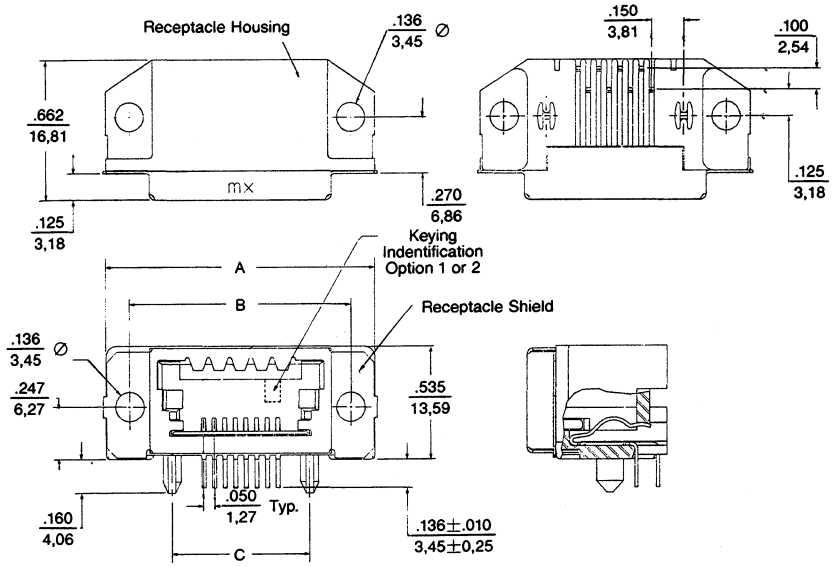
SEMCONN™ Shielded Receptacle

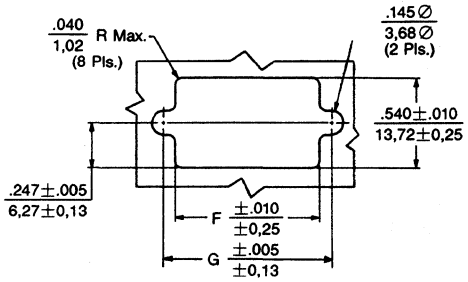
Right Angle Shielded Receptacle Assembly with Panel Ground

- Pre-loaded contact assures low insertion force-to-normal force ratio
- Covered pc leads reduce contamination potential during soldering operation
- High temperature plastic housing - SMT compatible
- Molex Product Specification PS-71350A
- Application Specification PS-71355

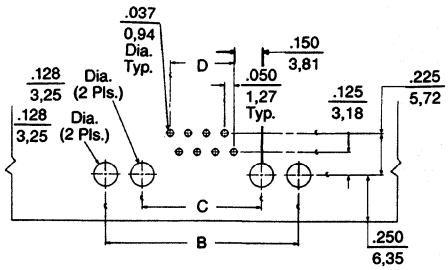


8 Ckt. Shown

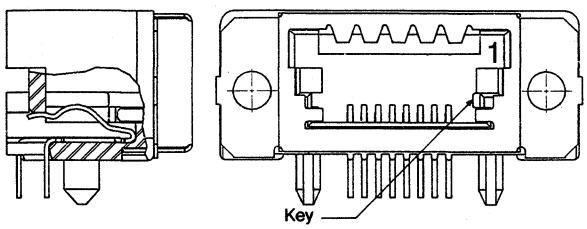




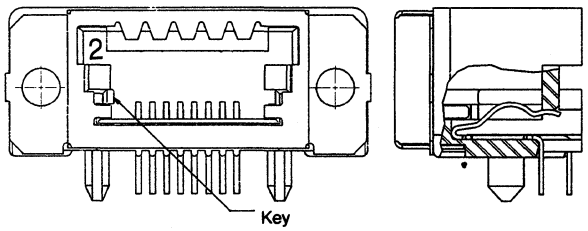
Panel Cut Out
NOTE: Maximum Panel Thickness .250



Recommended P.C.B. Layout
Foil Side Shown



Keying Option 1



Keying Option 2

Ordering Information

Ckt. Size	NON-KEYED VERSION Order Number	KEYING OPTION 1 Order Number	KEYING OPTION 2 Order Number	Dim. A	Dim. B	Dim. C	Dim. D	Dim. F	Dim. G
4	• 15-83-0004*	• 15-83-0034	• 15-83-0054	1.080 27,43	.850 21,59	.450 11,43	.150 3,81	.700 17,78	.850 21,59
6	• 15-83-0006*	• 15-83-0036	• 15-83-0056	1.180 29,97	.950 24,13	.550 13,97	.250 6,35	.800 20,32	.950 24,13
8	• 15-83-0008*	• 15-83-0038	• 15-83-0058	1.280 32,51	1.050 26,67	.650 16,51	.350 8,89	.900 22,86	1.050 26,67
16	• 15-83-0016*	• 15-83-0046	• 15-83-0066	1.680 42,67	1.450 36,83	1.050 26,67	.750 19,05	1.300 33,02	1.450 36,83

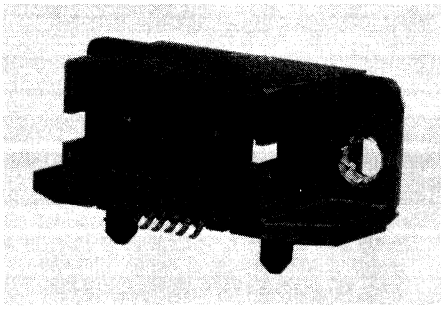
*Industry compatible

• U.S. Standard Product, available through Molex franchised distributors.

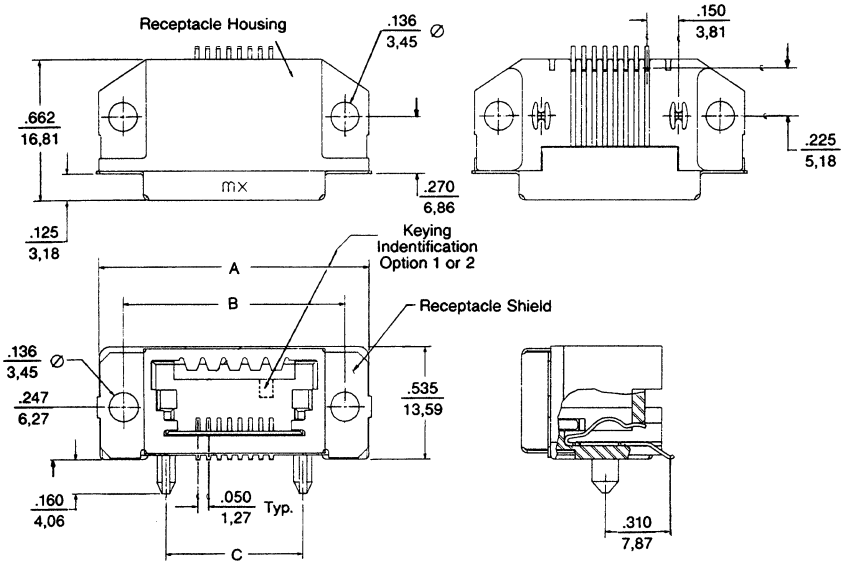
SEMCONN™
Surface Mount Shielded Receptacle

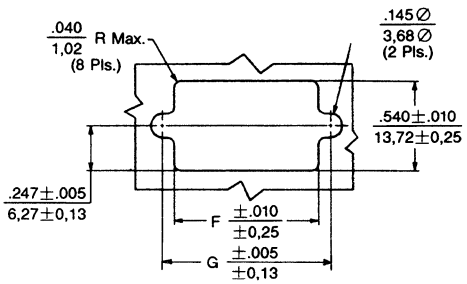
Right Angle Surface Mount Shielded Receptacle Assembly

- Pre-loaded contact low insertion force to normal force ratio
- With panel ground only
- High temperature plastic housing - SMT compatible
- Molex Product Specification PS-71350A
- Application Specification PS-71355

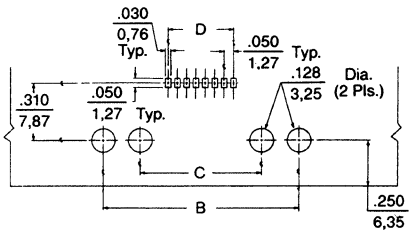


8 Ckt. Shown

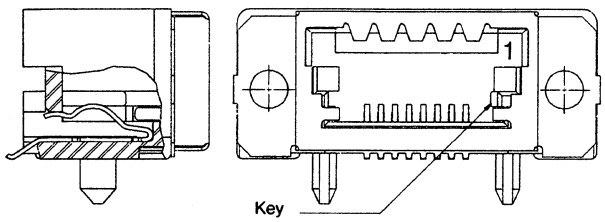




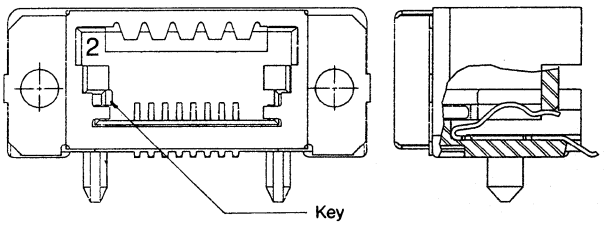
Panel Cut Out
NOTE: Maximum Panel Thickness .250



Recommended P.C.B. Layout
Component Side



Keying Option 1



Keying Option 2

Ordering Information

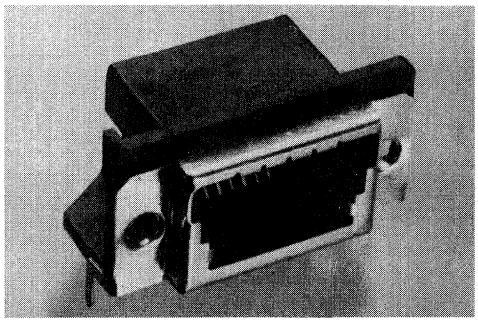
Ckt. Size	NON-KEYED VERSION Order Number	KEYING OPTION 1 Order Number	KEYING OPTION 2 Order Number	Dim. A	Dim. B	Dim. C	Dim. D	Dim. F	Dim. G
4	• 15-83-0204*	• 15-83-0234	• 15-83-0254	1.080 27,43	.850 21,59	.450 11,43	.150 3,81	.700 17,78	.850 21,59
6	• 15-83-0206*	• 15-83-0236	• 15-83-0256	1.180 29,97	.950 24,13	.550 13,97	.250 6,35	.800 20,32	.950 24,13
8	• 15-83-0208*	• 15-83-0238	• 15-83-0258	1.280 32,51	1.050 26,67	.650 16,51	.350 8,89	.900 22,86	1.050 26,67
16	• 15-83-0216*	• 15-83-0246	• 15-83-0266	1.680 42,67	1.450 36,83	1.050 26,67	.750 19,05	1.300 33,02	1.450 36,83

*Industry compatible

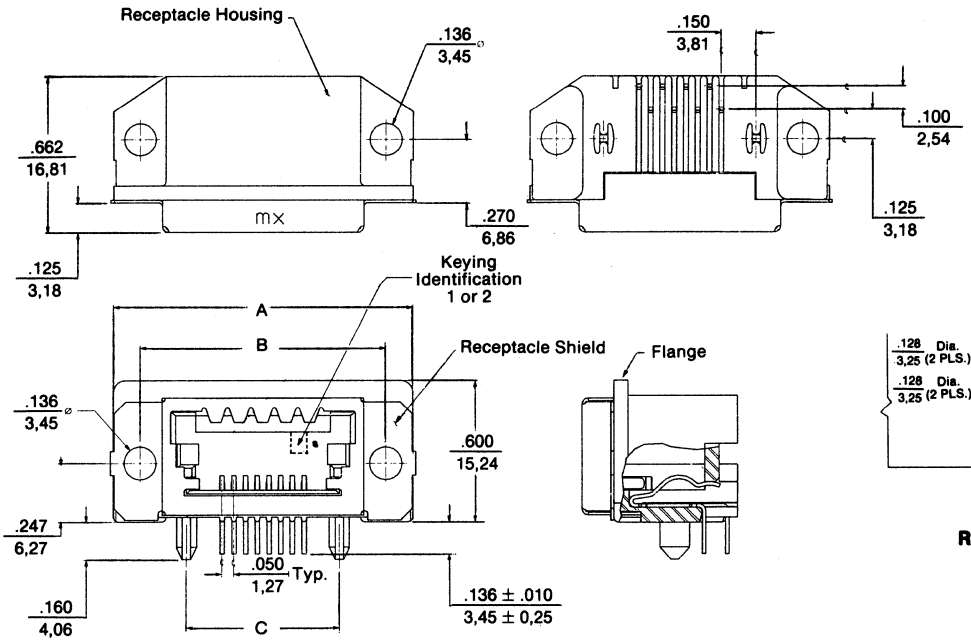
• U.S. Standard Product, available through Molex franchised distributors.

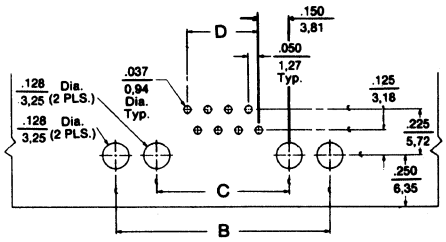
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Right Angle Flanged Shield Receptacle Assembly with PCB Ground

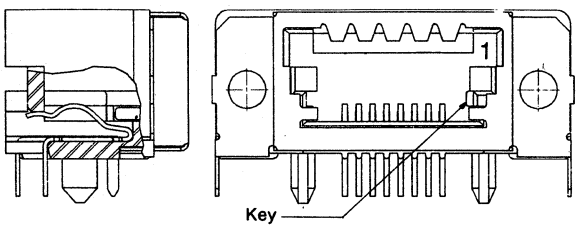


- Pre-loaded contact assures low insertion force-to-normal force ratio
- Covered pc leads reduce contamination during soldering operation
- High temperature plastic housing - SMT compatible
- Molex Product Specification PS-71350A
- Application Specification PS-71355

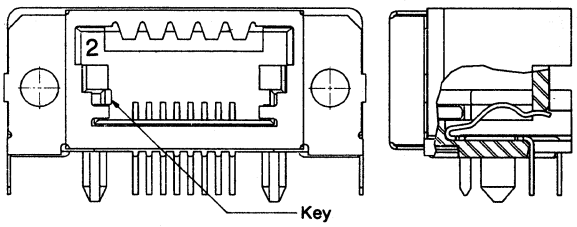




Recommended P.C.B. Layout
Foil Side Shown



KEYING OPTION 1

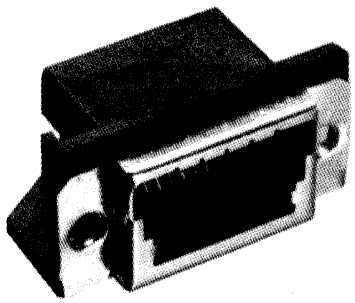


KEYING OPTION 2

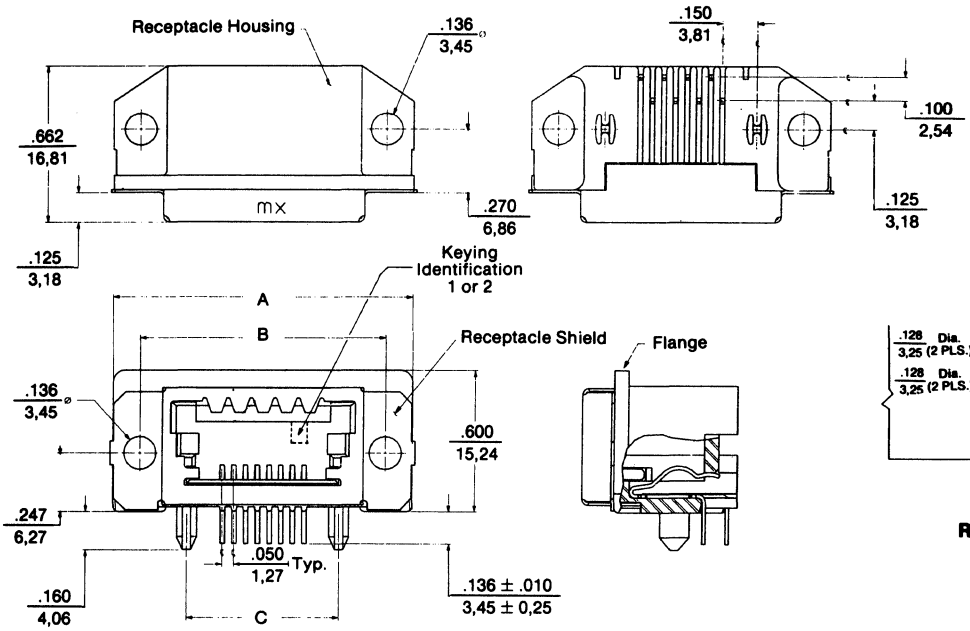
Ckt. Size	NON-KEYED VERSION Order Number	KEYING OPTION 1 Order Number	KEYING OPTION 2 Order Number	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E
4	15-83-0404*	15-83-0434	15-83-0454	1.080 27,43	.850 21,59	.450 11,43	.150 3,81	1.073 27,25
6	15-83-0406*	15-83-0436	15-83-0456	1.180 29,97	.950 24,13	.550 13,97	.250 6,35	1.173 29,79
8	15-83-0408*	15-83-0438	15-83-0458	1.280 32,51	1.050 26,67	.650 16,51	.350 8,89	1.273 32,33
16	15-83-0416*	15-83-0446	15-83-0466	1.680 42,67	1.450 36,83	1.050 26,67	.750 19,05	1.673 42,49

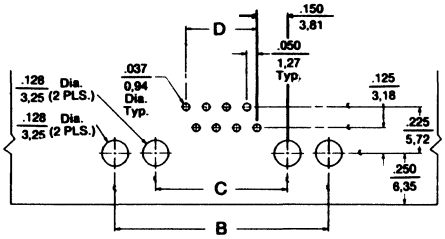
*Industry compatible

Right Angle Flanged Shielded Receptacle Assembly with Panel Ground

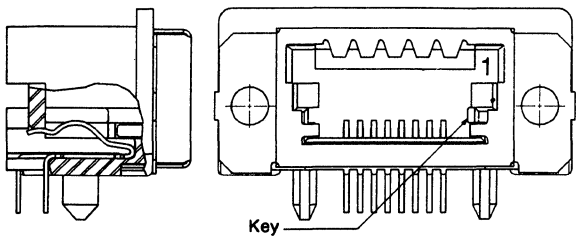


- Pre-loaded contact assures low insertion force-to-normal force ratio
- Covered pc leads reduce contamination potential during soldering operation
- High temperature plastic housing - SMT compatible
- Molex Product Specification PS-71350A
- Application Specification PS-71355

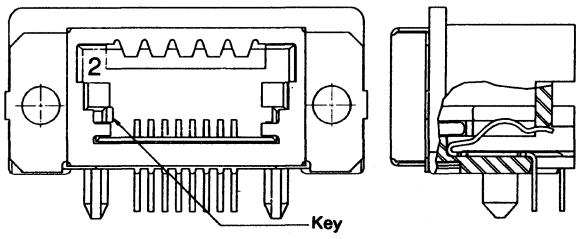




Recommended P.C.B. Layout
Foil Side Shown



KEYING OPTION 1



KEYING OPTION 2

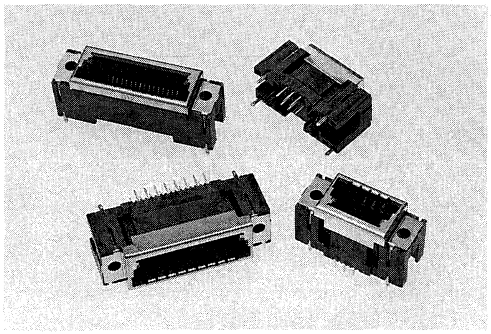
Ckt. Size	NON-KEYED VERSION Order Number	KEYING OPTION 1 Order Number	KEYING OPTION 2 Order Number	Dim. A	Dim. B	Dim. C	Dim. D
4	15-83-0104*	15-83-0134	15-83-0154	1.080 27,43	.850 21,59	.450 11,43	.150 3,81
6	15-83-0106*	15-83-0136	15-83-0156	1.180 29,97	.950 24,13	.550 13,97	.250 6,35
8	15-83-0108*	15-83-0138	15-83-0158	1.280 32,51	1.050 26,67	.650 16,51	.350 8,89
16	15-83-0116*	15-83-0146	15-83-0166	1.680 42,67	1.450 36,83	1.050 26,67	.750 19,05

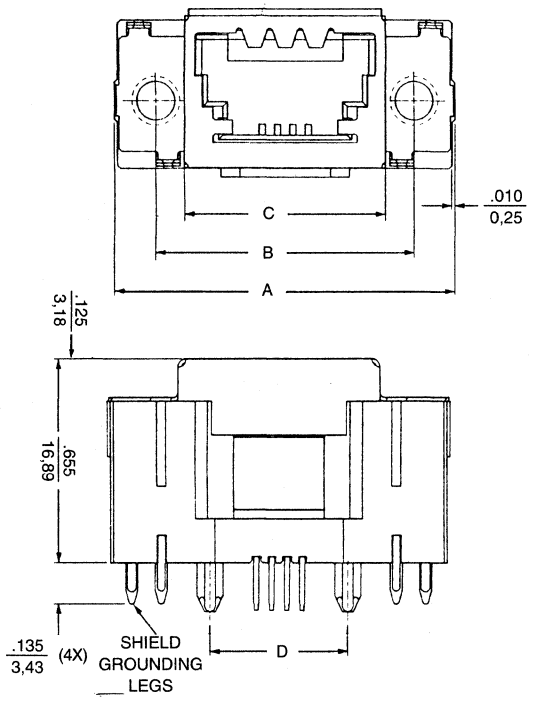
*Industry compatible

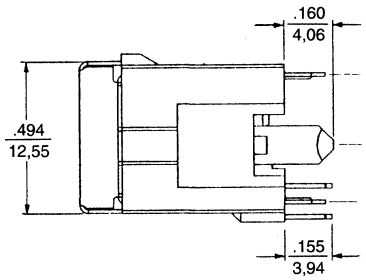
SEMCONN™ Shielded Receptacle

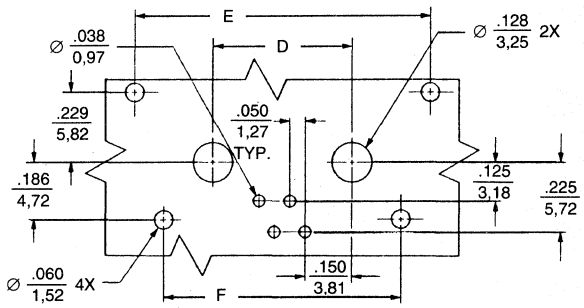
Vertical Shielded Receptacle Assembly with PCB Ground

- Four integral pcb shield ground tabs assures positive ground without hardware
- Covered pc leads allows close placement of other components
- Preloaded contacts assures high normal force with low insertion force
- Molded flange provides stability and accurately locates pc ground tabs
- High temp LCP housing is SMT compatible
- Product Specification PS-71350A

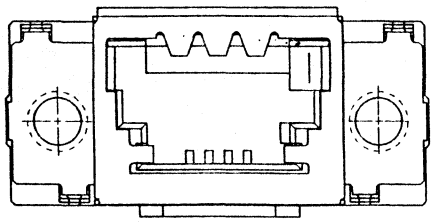




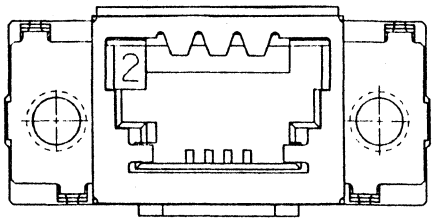




PCB LAYOUT



KEYING OPTION 1



KEYING OPTION 2

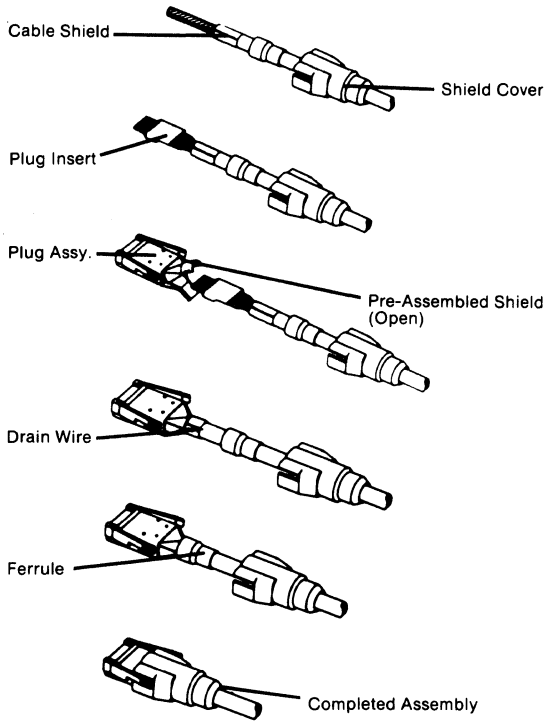
Ordering Information

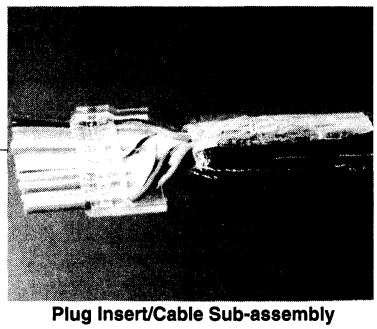
Circuit Size	Non-Keyed Version	Key #1 Version	Key #2 Version	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F
4	•15-83-0904	•15-83-0934	•15-83-0954	1.120 28,45	.850 21,59	.660 16,76	.450 11,43	.960 24,38	.768 19,51
6	•15-83-0906	•15-83-0936	•15-83-0956	1.220 30,99	.950 24,13	.760 19,30	.550 13,97	1.060 26,92	.868 22,05
8	•15-83-0908	•15-83-0938	•15-83-0958	1.320 33,53	1.050 26,67	.860 21,84	.650 16,51	1.160 29,46	.968 24,59
16	•15-83-0916	•15-83-0946	•15-83-0966	1.720 43,69	1.450 36,83	1.260 32,00	1.050 26,67	1.560 39,62	1.369 34,75

• U.S. Standard Product available through Molex franchised distributors.

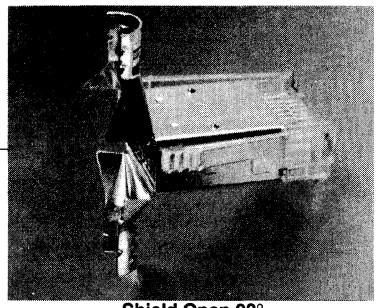
Round Cable Plug System

Round Cable Plug Components and Wire Termination Sequence





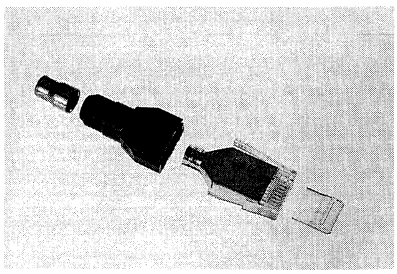
Plug Insert/Cable Sub-assembly



Shield Open 90°
Ready for Plug Cable Sub-assembly



Final Product

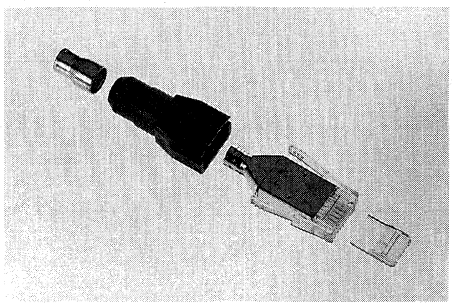


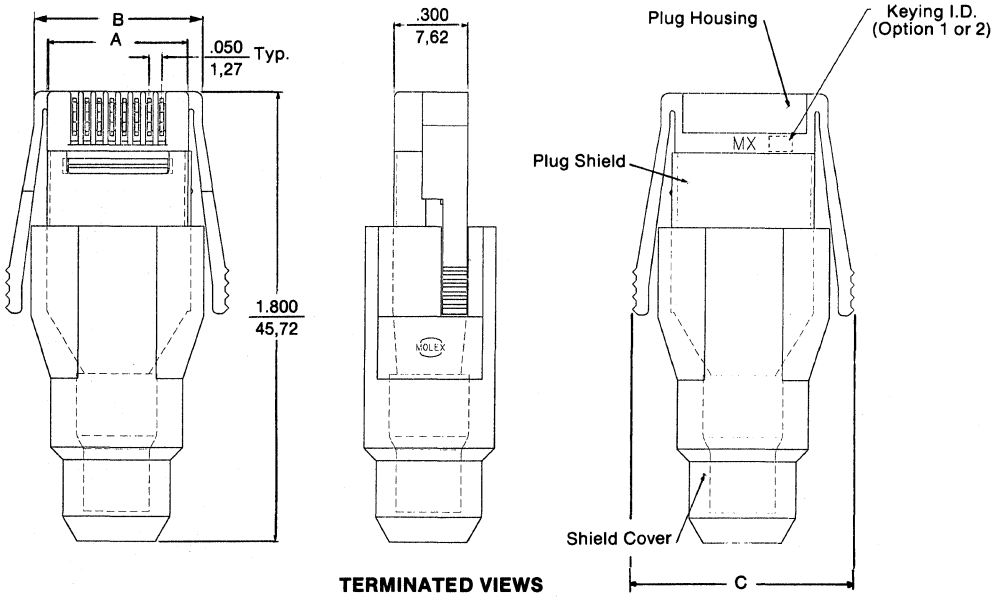
Features

- ☐ Plug with pre-assembled shield
- ☐ Plug insert provides:
  - proper sequencing of wires
  - proper length for correct termination
- ☐ Plug kits are packaged with plug, plug insert, ferrule and shield cover in separate poly bags
- ☐ Shield cover for aesthetics and ESD protection
- ☐ Low applied cost for cable assembly
- ☐ Clear polycarbonate housing for termination inspection

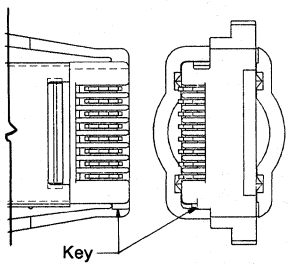
Plug Assembly for Shielded Round Cable

- Pre-assembled one-piece shield
- Non-metallic shield cover optional
- Three strain reliefs
- Wire management plug insert provided
- Molex Product Specification PS-71350A
- Termination Application Specification PS-71310

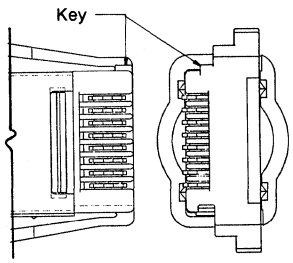




TERMINATED VIEWS



KEYING OPTION 1



KEYING OPTION 2

Ordering Information Clear Plug Kits* with BLACK SHIELD COVERS

Ckt. Size	NON-KEYED VERSION Order Number	KEYING OPTION 1 Order Number	KEYING OPTION 2 Order Number	Dim. A	Dim. B	Dim. C
4	•15-83-0504*	•15-83-0534	•15-83-0554	.366 9,30	.475 12,07	.696 17,68
6	•15-83-0506*	•15-83-0536	•15-83-0556	.466 11,84	.575 14,61	.796 20,22
8	•15-83-0508*	•15-83-0538	•15-83-0558	.566 14,38	.675 17,15	.896 22,76
16	•15-83-0516*	•15-83-0546	•15-83-0566	.966 24,54	1.075 27,31	1.296 32,92
6/4[1]	15-83-1506	15-83-1536	15-83-1556	.466 11,84	.575 14,61	.796 20,22
8/6[2]	15-83-1508	15-83-1538	15-83-1558	.566 14,38	.675 17,15	.896 22,76

* Kit includes plug with preassembled shield, plug insert, crimp ferrule, and black shield cover.

• U.S. Standard Product, available through Molex franchised distributors

SEMCONN™ Shielded Plugs

Ordering Information Clear Plug Kits* with GRAY SHIELD COVERS

Ckt. Size	NON-KEYED VERSION Order Number	KEYING OPTION 1 Order Number	KEYING OPTION 2 Order Number	Dim. A	Dim. B	Dim. C
4	15-83-1104	15-83-1124	15-83-1144	.366 9,30	.475 12,07	.696 17,68
6	15-83-1106	15-83-1126	15-83-1146	.466 11,84	.575 14,61	.796 20,22
8	15-83-1108	15-83-1128	15-83-1148	.566 14,38	.675 17,15	.896 22,76
16	15-83-1116	15-83-1136	15-83-1156	.966 24,54	1.075 27,31	1.296 32,92

* Kit includes plug with preassembled shield, plug insert, crimp ferrule, and gray shield cover.

Ordering Information Clear Plug Kits* without SHIELD COVERS

Ckt. Size	NON-KEYED VERSION Order Number	KEYING OPTION 1 Order Number	KEYING OPTION 2 Order Number	Dim. A	Dim. B	Dim. C
4	15-83-0804	15-83-0829	15-83-0854	.366 9,30	.475 12,07	.696 17,68
6	15-83-0806	15-83-0831	15-83-0856	.466 11,84	.575 14,61	.796 20,22
8	15-83-0808	15-83-0833	15-83-0858	.566 14,38	.675 17,15	.896 22,76
16	15-83-0816	15-83-0841	15-83-0866	.966 24,54	1.075 27,31	1.296 32,92
6/4[1]	15-83-0807	15-83-0832	15-83-0857	.466 11,84	.575 14,61	.796 20,22
8/6[2]	15-83-0809	15-83-0834	15-83-0859	.566 14,38	.675 17,15	.896 22,76
6/4[3]	15-83-1516	N/A	N/A	.466 11,84	.575 14,61	.796 20,22

* Kit includes plug with preassembled shield, plug insert, and crimp ferrule.
[1] requires cable O.D. of .218
[2] requires cable O.D. of .234
[3] requires cable O.D. of .190

Ordering Information Smoke Gray Plug Kits* with BLACK SHIELD COVERS

Ckt. Size	NON-KEYED VERSION Order Number	KEYING OPTION 1 Order Number	KEYING OPTION 2 Order Number	Dim. A	Dim. B	Dim. C
4	15-83-2504	15-83-2534	15-83-2554	.366 9,30	.475 12,07	.696 17,68
6	15-83-2506	15-83-2536	15-83-2556	.466 11,84	.575 14,61	.796 20,22
8	15-83-2508	15-83-2538	15-83-2558	.566 14,38	.675 17,15	.896 22,76
16	15-83-2516	15-83-2546	15-83-2566	.966 24,54	1.075 27,31	1.296 32,92

* Kit includes plug with preassembled shield, plug insert, crimp ferrule, and gray shield cover.

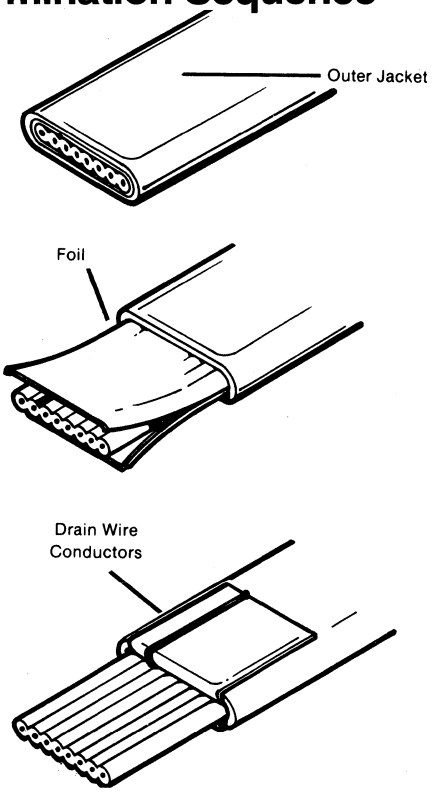
Ordering Information Smoke Gray Plug Kits* without SHIELD COVERS

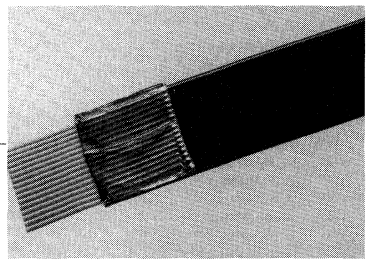
Ckt. Size	NON-KEYED VERSION Order Number	KEYING OPTION 1 Order Number	KEYING OPTION 2 Order Number	Dim. A	Dim. B	Dim. C
4	15-83-1804	15-83-1834	15-83-1854	.366 9,30	.475 12,07	.696 17,68
6	15-83-1806	15-83-1836	15-83-1856	.466 11,84	.575 14,61	.796 20,22
8	15-83-1808	15-83-1838	15-83-1858	.566 14,38	.675 17,15	.896 22,76
16	15-83-1816	15-83-1846	15-83-1866	.966 24,54	1.075 27,31	1.296 32,92

* Kit includes plug with preassembled shield, plug insert, and crimp ferrule.

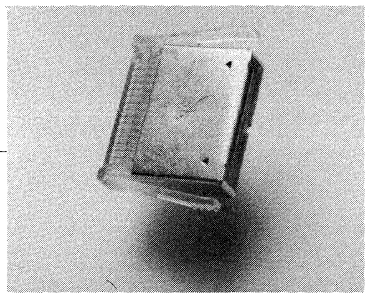
Flat Cable Plug System

Flat Cable Plug Components and Wire Termination Sequence

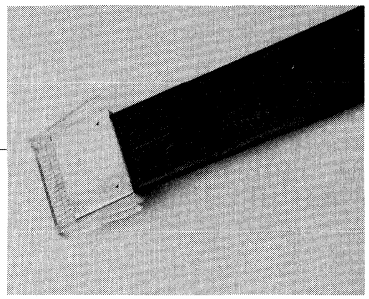




Cable Preparation



Flat Cable Plug

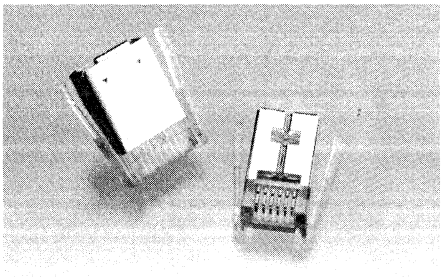


Final Product

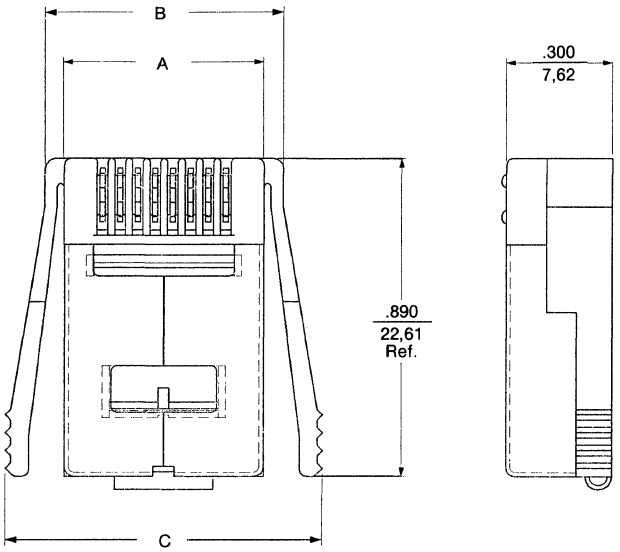
SEMCONN™ Shielded Plugs

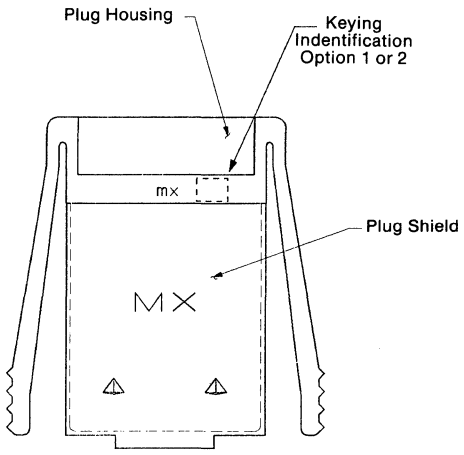
Plug Assembly for .050 Center Shielded Flat Cable

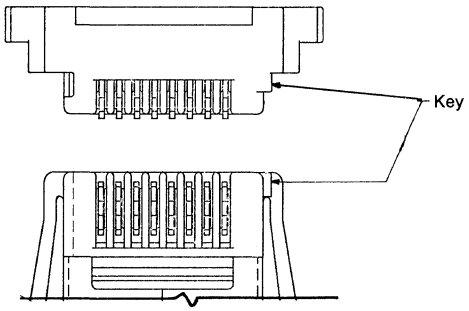
- Pre-assembled shield
- Plug shield coined at seam
- One step termination for low applied cost in cable assembly
- Clear polycarbonate housing for termination inspection
- Two strain reliefs
- Molex Product Specification PS-71350A
- Application Specification PS-71350



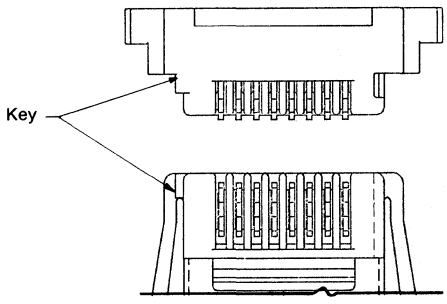
8 circuit shown







KEYING OPTION 1



KEYING OPTION 2

Ordering Information

Ckt. Size	NON-KEYED VERSION Order Number	KEYING OPTION 1 Order Number	KEYING OPTION 2 Order Number	Dim. A	Dim. B	Dim. C
4	•15-83-0604*	•15-83-0634	•15-83-0654	.366 9,30	.475 12,06	.678 17,22
6	•15-83-0606*	•15-83-0636	•15-83-0656	.466 11,84	.575 14,60	.778 19,76
8	•15-83-0608*	•15-83-0638	•15-83-0658	.566 14,38	.675 17,14	.878 22,30
16	•15-83-0616*	•15-83-0646	•15-83-0666	.966 24,54	1.075 27,30	1.278 32,46

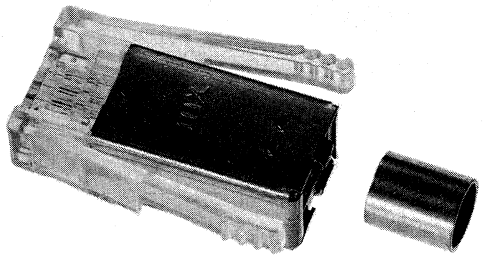
* Industry compatible
• U.S. Standard Products, available through Molex franchised distributors.

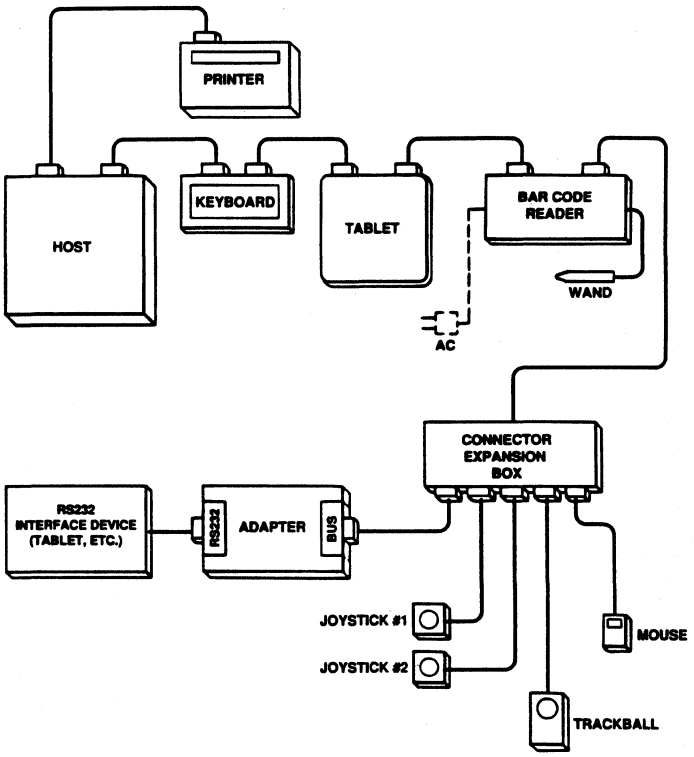
SEMCONN™ ACCESS.bus* Connector System

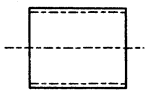
The 4 wire ACCESS.bus system greatly simplifies connection of peripherals such as a keyboard, digitizing pad, mouse, track ball, joystick, bar code reader, etc. to a PC or workstation by allowing up to 125 devices to be daisy chained together from a single port.

ACCESS.bus allows hot plugging and automatically reconfigures the operating system for the device just added to (or removed from) the bus.

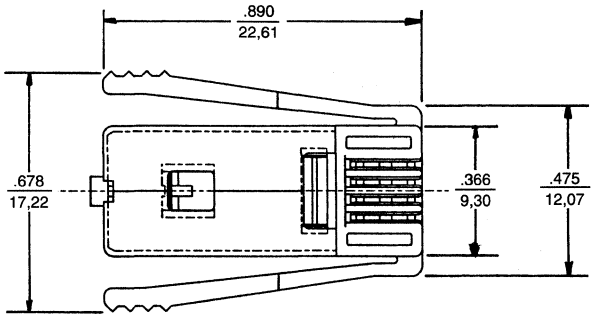
- Two integral wire strain reliefs
- Optional ferrule provides positive ground and pre-aligns wires for termination
- Dual integral locking latch
- Application Specification: with ferrule: PS-71564 without ferrule: PS-71564-A
- Product Specification: PS 71350-A







ROUND TO FLAT CRIMP FERRULE



NON-KEYED PLUG SUB-ASSEMBLY

Round to Flat Cable Plug Kit

Ordering Information - Plug

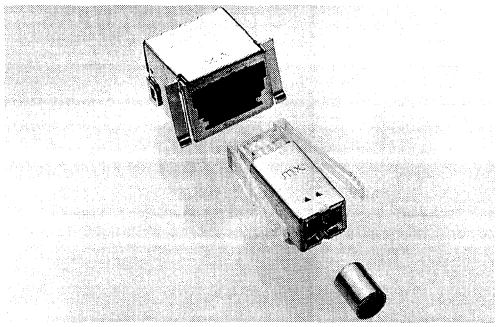
Housing	With Ferrule	Without Ferrule
Clear	•15-83-1564	•15-83-0604
Smoked Gray	15-83-1604	15-83-0684

• U.S. Standard Product, available through Molex franchised distributors.

*ACCESS.bus is a registered trademark of Digital Equipment Corp.

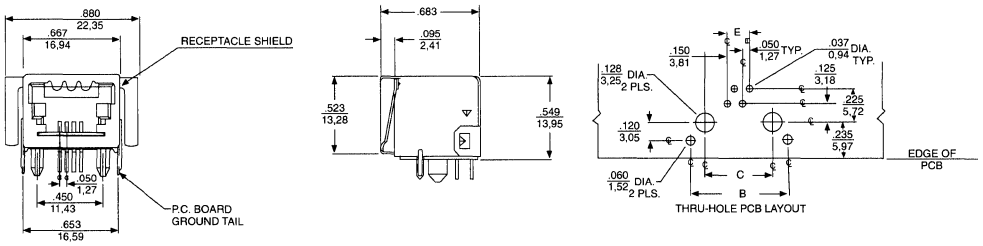
SEMCONN™ ACCESS.bus* Connector System

SEMCONN ACCESS.bus Full Shield Receptacle

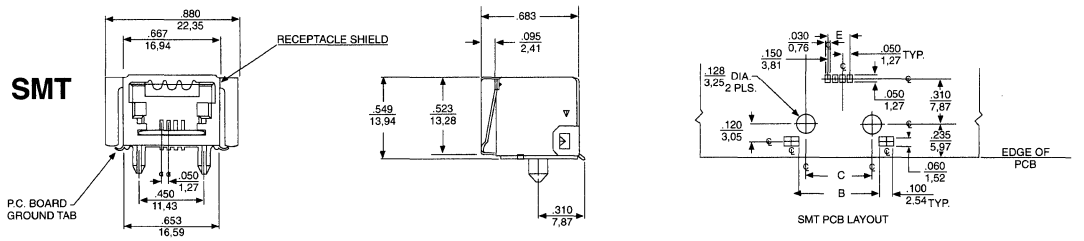


- ☐ Four sided shield for maximum EMI/RFI control
- ☐ Flangeless design minimizes PCB real estate
- ☐ Dual panel grounds for maximum EMI/RFI control
- ☐ Panel stops prevent overstress of panel grounds
- ☐ High temp LCP housing for SMT processing
- ☐ Product specification: PS-71350-A
- ☐ Application specification: PS-71565

Thru-Hole



SMT

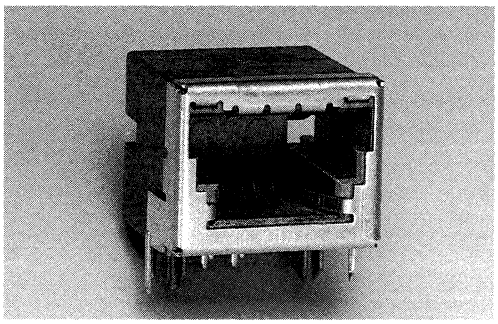


Ordering Information

Thru-Hole	SMT
•15-83-0164	15-83-0364

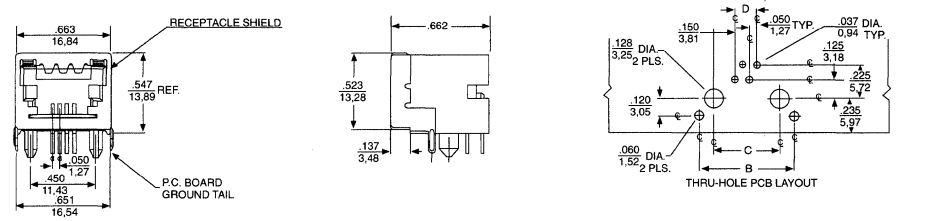
•U.S. Standard Product, available through Molex franchised distributors.

SEMCONN ACCESS.bus Partial Shield Receptacle

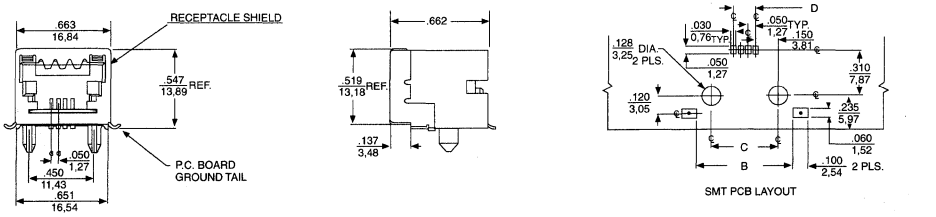


- ☐ Partial shield assures cable shield ground to PCB
- ☐ Flangeless design minimizes PCB real estate
- ☐ High temp LCP housing for SMT processing
- ☐ Product specification: PS-71350-A
- ☐ Application specification: PS-71565

Thru-Hole



SMT



Ordering Information

Thru-Hole	SMT
•15-83-0064	15-83-0264

•U.S. Standard Product, available through Molex franchised distributors.

*ACCESS.bus is a registered trademark of Digital Equipment Corp.

Mini-DIN
PCB Receptacle

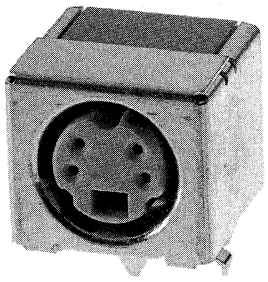
87220 Series

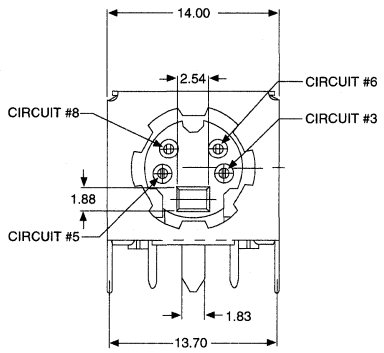
- EMI/RFI Shielding
- Front Shield Design
- Optional kinked metal PCB hold downs - contact factory
- Positive polarization
- Select terminal loading - contact factory

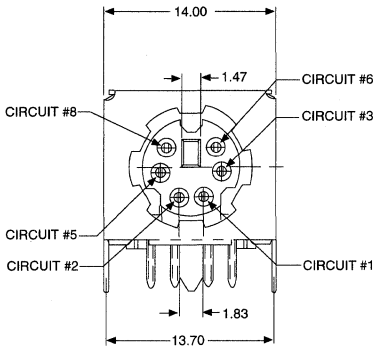
Specifications:

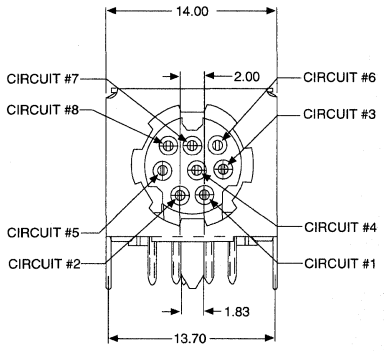
Housing: UL 94V-0 glass filled polyester

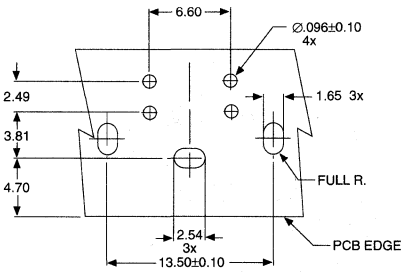
Contacts: Phosphor bronze, select gold plating, tin/lead pc tail



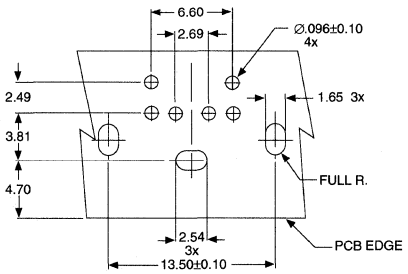




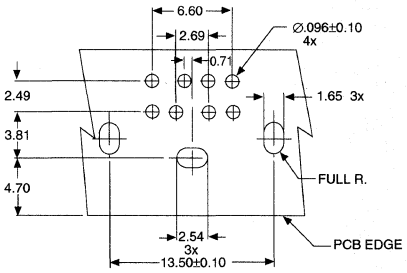




PCB LAYOUT - 4 CIRCUIT



PCB LAYOUT - 6 CIRCUIT



PCB LAYOUT - 8 CIRCUIT

Ordering Information

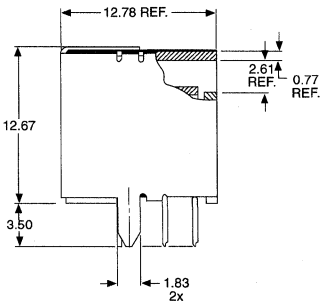
Order Number Formula

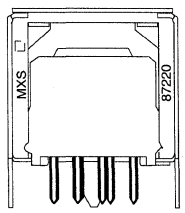
87220 - **XX X X**

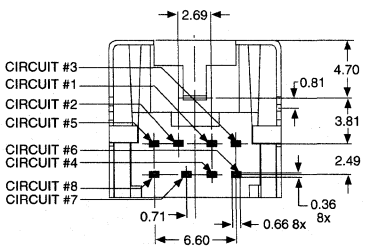
CIRCUIT SIZE
04 = 4 circuits
06 = 6 circuits
08 = 8 circuits

HOUSING COLOR
0 = Grey
1 = Black

TERMINAL PLATING CODE
1 = 30µ"/0,76µm min. select gold
3 = 10µ"/0,76µm min. select gold







Mini-DIN PCB Receptacle

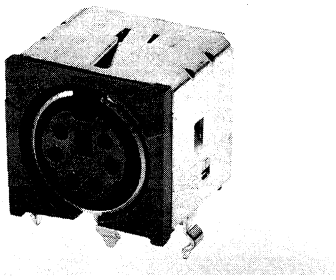
87123 Series

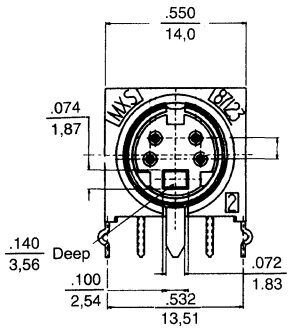
- EMI/RFI Shielding
- Fully shielded top, back and sides
- Kinked metal hold-down provides stable retention to PCB
- Positive polarization
- Select terminal loading (contact factory)

Specifications:

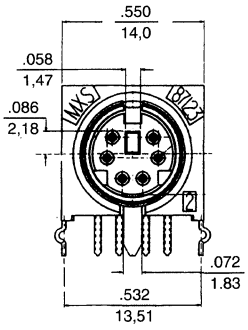
Housing: UL 94V-0 glass-filled polyester

Contacts: Phosphor bronze; select gold plating, tin/lead p.c. tail

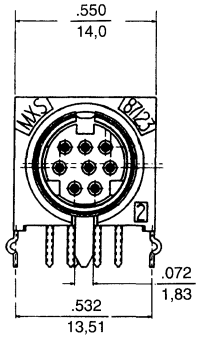




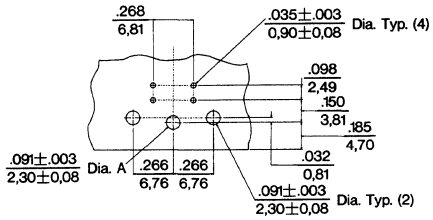
4 Circuit



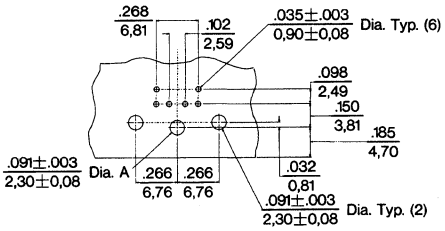
6 Circuit



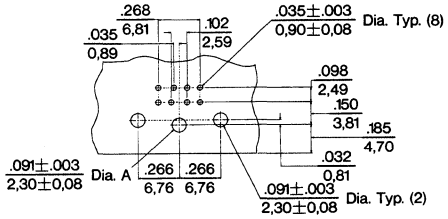
8 Circuit



PCB Layout, 4 Circuit



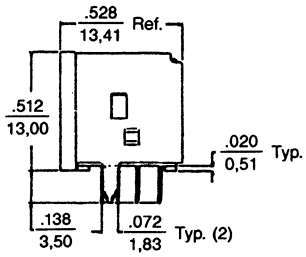
PCB Layout, 6 Circuit

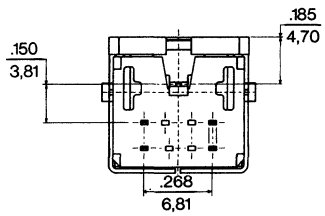


PCB Layout, 8 Circuit

Ordering Information

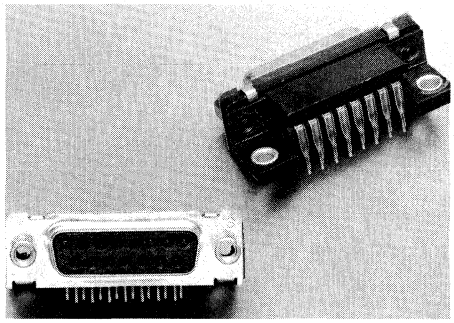
Order Number Formula	
87123 - XX0X	
CIRCUIT SIZE	**TERMINAL PLATING CODE**
04 = 4 circuits	1 = 30µ"/0,76µm min. gold
06 = 6 circuits	3 = 10µ"/.254µm min. gold
08 = 8 circuits	





D-Subminiature Right Angle PCB Mount Receptacle, .318" Footprint

Introduction



Molex D-Subminiature right angle PCB mount receptacles are designed to mate with D-Subminiature plugs that conform to RS232, RS442, and RS449 standards.

The connectors are made of high temperature plastic able to withstand harsh environments and various SMT soldering techniques.

The terminals are offered with selective gold plating in the contact area. A variety of connector face mounting options is also available. Fork locks hold the connector in place and provide added stability before soldering.

Specification 82009 Connectors

Meets industry standard dimensional, mechanical, and electrical requirements specified in EIA Standards RS232, RS442, and RS449.

UL Recognized/CSA Certified

Material:

Housing - Glass-filled PET, UL rated 94V-0, color: black

Terminal - Phosphor bronze

Plating - 50 microinches (1,27 microns) min. nickel overall, 150 microinches (3,81 microns) tin/lead selectively on solder tails, and gold selectively in contact area. See ordering information for various gold thickness options available.

Metal Shell - Steel; bright tin plate over copper underplate

Face Mounting Hardware - Steel; nickel plated

Mechanical:

Insertion Force - Max. insertion force of a .0410" (1,0414) dia. pin will be 12 oz. (340,5 gm)

Withdrawal Forces - Min. withdrawal force of .0390" (0,9906) dia. pin will be 7.5 oz. (21,3 gm)

Contact Retention - Contacts will withstand minimum 5 lb. (2,27 kg) force without backing out

Electrical:

Insulation Resistance - 20K megohms initial, 5K megohms min. final

Dielectric Withstanding Voltage - 1000 VAC RMS min., applied between adjacent terminals

Contact Resistance - 10 milliohms max. initial, dry circuit condition

Rated Current - 5 amps max. (30°C max. temperature rise)

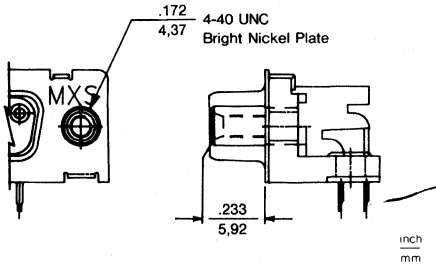
Capacitance - 2 picofarads max. between adjacent contacts

PCB Specifications

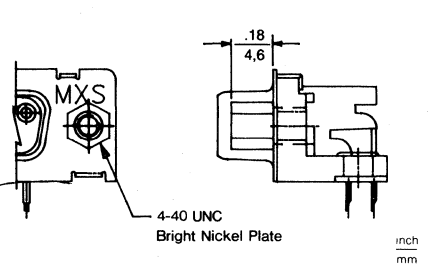
Recommended - PCB thickness .062 ± .008 (1,57 ± 0,20)

Face Mounting Hardware Dimensions

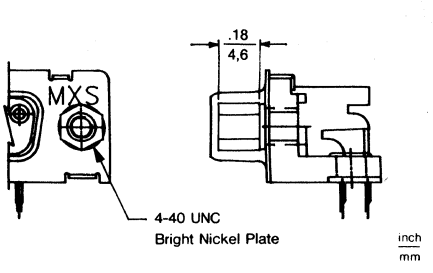
Fixed Round Screwlock



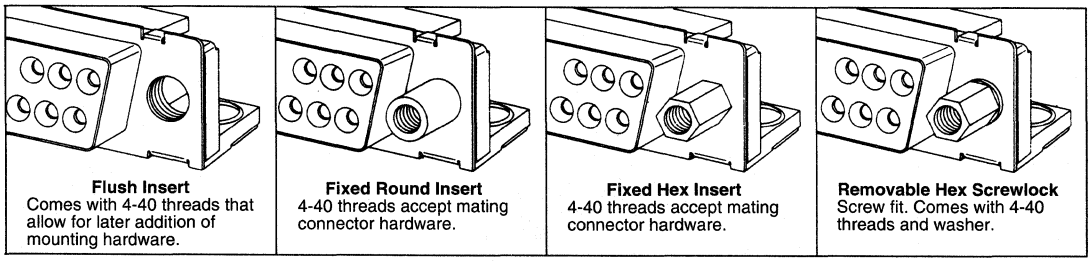
Fixed Hex Screwlock



Removable Hex Screwlock



Face Mounting Hardware Options



Flush Insert
Comes with 4-40 threads that allow for later addition of mounting hardware.

Fixed Round Insert
4-40 threads accept mating connector hardware.

Fixed Hex Insert
4-40 threads accept mating connector hardware.

Removable Hex Screwlock
Screw fit. Comes with 4-40 threads and washer.

D-Subminiature Right Angle PCB Mount Receptacle, .318" Footprint

82009 Series
Metal Shell

- ☐ Fork boardlock provides positive PCB hold down during wave solder
- ☐ Compatible with automated assembly
- ☐ Integral ground strap ensures effective EMI/RFI suppression
- ☐ Easy one-step assembly to PCB

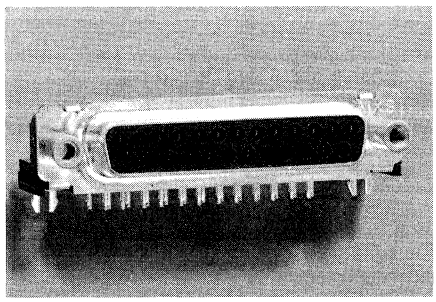
Specifications:

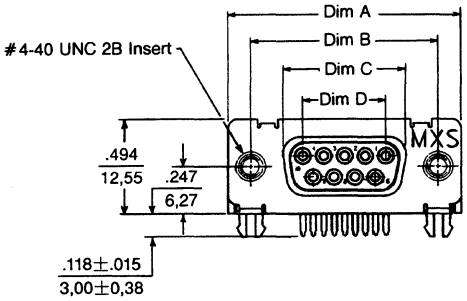
Housing: Glass-filled UL 94V-0 PET material

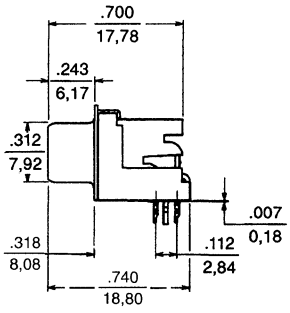
Terminal: Phosphor bronze

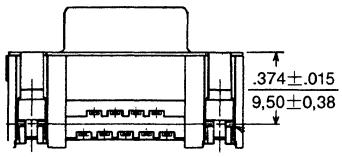
Shell: Tin-plated steel

Plating: Selective gold in contact area; tin lead on p.c. tails

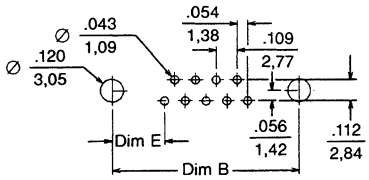








inches
mm



Recommended PCB Layout

Dimensions

Circuit Size	Dim A	Dim B	Dim C	Dim D	Dim E
9	1.224 31,09	0.984 24,99	0.645 16,38	0.436 11,07	.274 6,96
25	2.091 53,11	1.852 47,04	1.511 38,38	1.308 33,22	.272 6,91

Ordering Information

Order Number Formula

82009 - **8 X X X**

CKT SIZE
- 0 = 9
- 3 = 25

TERMINAL PLATING CODE
- 4 = .76µm/30µin. Gold Min.
- 5 = .38µm/15µin. Gold Min.

FACE MOUNTING HARDWARE
- 1 = Fixed Round Insert
- 2 = Flush Insert
- 3 = Fixed Hex Insert
- 4 = Removable Hex Screwlock

• U.S. Standard Product, available through Molex frachised distributors.

0

D-Sub High Density PCB-Mount Receptacle

71325 Series

- One piece shield and PCB ground for positive EMI/RFI shielding
- 15 circuit, shell size E (#1)
- Low profile design
- SMT process compatible
- P.C. Retention eyelet ensures connector is secure prior to wave soldering to standard .062 PCB
- Threaded eyelet with anti-rotation hex

Specifications:

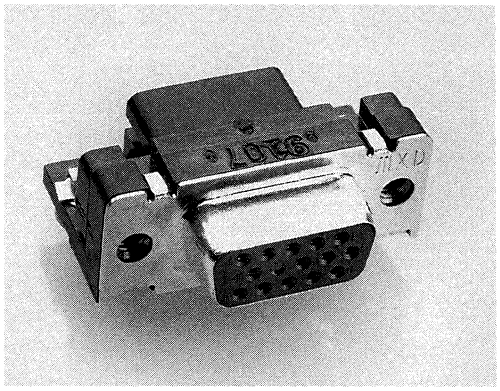
Housing: Glass filled UL 94V-O High temperature thermoplastic

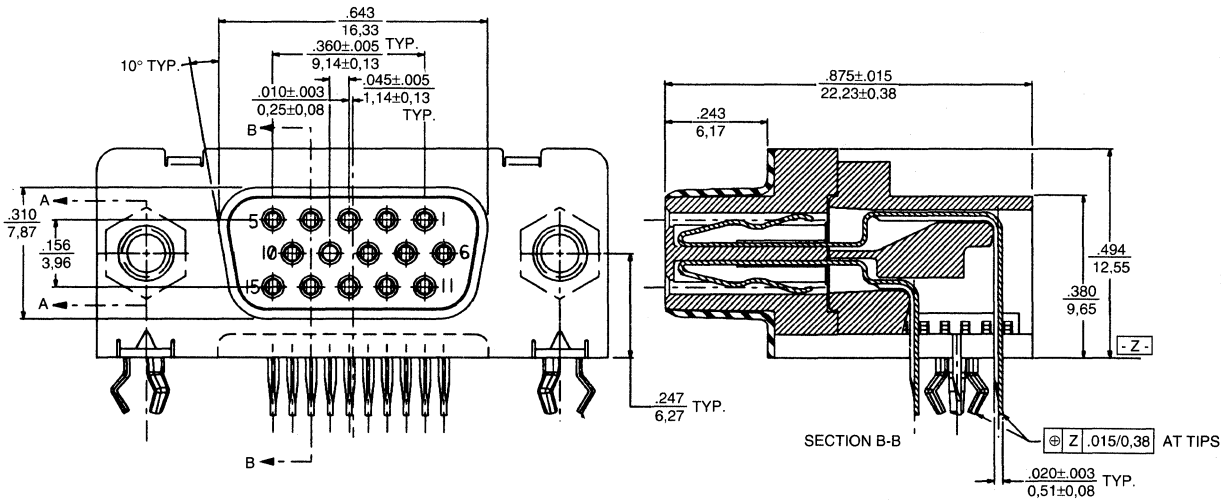
Contact Material: Phosphor Bronze

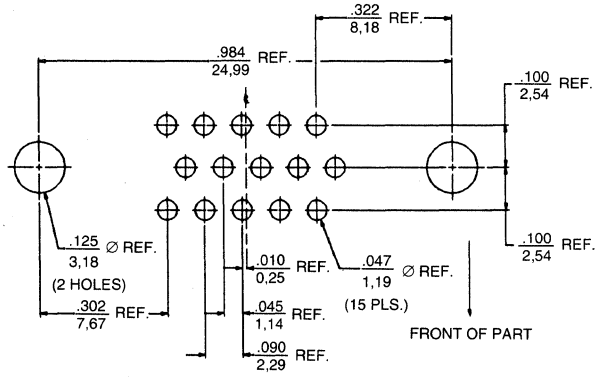
Shell: Tin plated steel, or Nickel plated steel

Plating: Rivet, 4-40 insert: unplated; PCB Eyelets: 100µ" min tin

Contact: 30µ" gold in contact area; 100-200µ" tin/lead on pc tail; 50µ" nickel underplate overall







PCB LAYOUT

Ordering Information

Bright Tin Plated Shell - Tray Pack

Voided Position	P.C. Retention Eyelet	Tubular Rivet	Plain Hole
Void (#9)	15-41-0041	15-41-0042	15-41-0045
None	15-41-0043	15-41-0040	15-41-0044

Bright Tin Plated Shell - Tube Pack

Voided Position	P.C. Retention Eyelet
Void (#9)	15-41-0061
None	15-41-0060

Bright Nickel Plated Shell - Tray Pack

Voided Position	P.C. Retention Eyelet
Void (#9)	15-41-0070
None	15-41-0071

Bright Nickel Plated Shell - Tube Pack

Voided Position	P.C. Retention Eyelet
Void (#9)	15-41-0072
None	15-41-0073

D-Sub High Density PCB-Mount Receptacle

Preferred Version in Europe and the Far East

87112 Series

- EMI/RFI suppression
- High density design offers PC board space savings
- 15 circuit, shell size E (#1)
- Fork boardlock ensures connector is secure prior to wave soldering
- Intermateable with industry standard High Density D-Subminiature crimp connectors
- Available with voided circuit (Contact Factory)

Specifications:

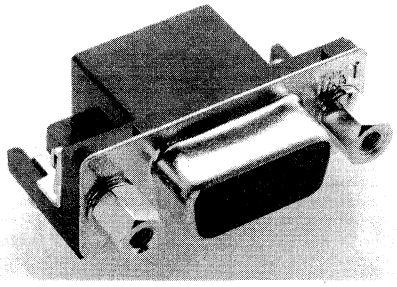
Housing: Glass-filled UL 94 V-0 PET material

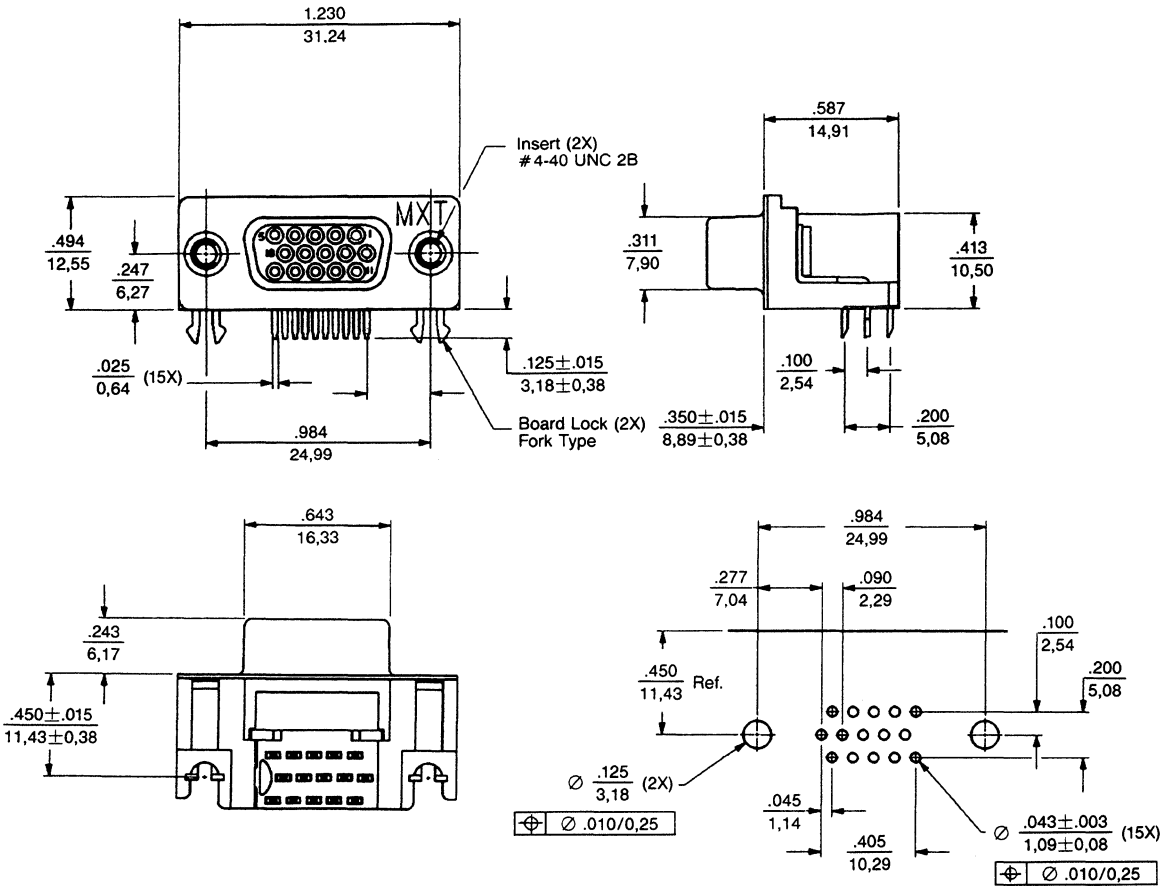
Terminal: Phosphor bronze

Shell: Tin-plated steel

Plating: Selective gold in contact area; tin lead on p.c. tails

Fork Boardlock: Tin plated steel





inches
mm

Recommended PCB Layout
(Component Side)

Ordering Information

Order Number Formula
87112 - 60 **X X**

CONTACT PLATING CODE
4 = 30µin/0.76µm gold
5 = 15µin/0.38µm gold
6 = Gold Flash

FACE MOUNTING HARDWARE
2 = Flush Insert (threaded)
4 = Removable Hex Screwlock

D-Subminiature High Density Crimp Connector

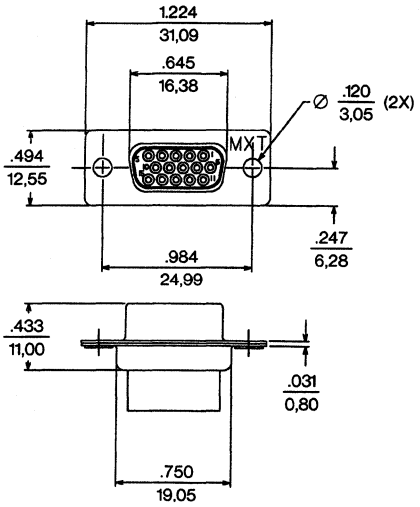
87118 Series Receptacle Housing

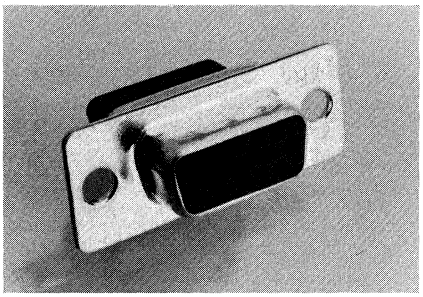
- Shell size E (#1)
- 15 circuit
- Intermateable with industry standard high density D-Subminiature connectors or shell size E
- Accepts pin contact series 87116

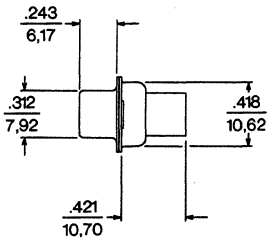
Specifications:

Housing: Glass-filled UL 94V-0 PBT

Shell: Steel, tin plated





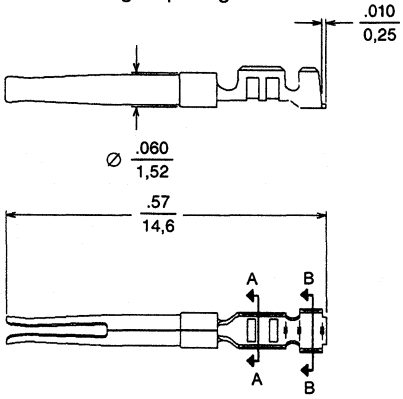


Ordering Information

Circuit Size	Order No.
15	87118-0001

87116 Series Crimp Terminal, Receptacle

- Available in chain or loose form
- Wire gauge AWG 24-32
- Selective gold plating in contact area



Specifications:

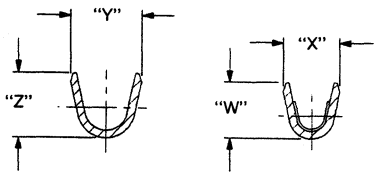
Terminal material: Brass

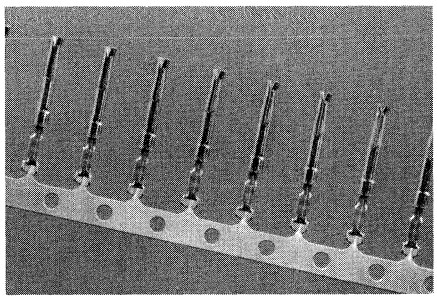
Contact current rating: 3 amps max.

Dielectric withstanding voltage: 1000 VAC

Contact resistance: 15 milliohms max.

Insulation resistance: 5000 megohms min.





Application Tooling: Contact Factory for TM80 Stripper/Crimper

Ordering Information

Order Number Formula
87116 - 0 X X X

PLATING CODE
Select Gold
4 = 15µin/0,38µm gold min., tin/lead in crimp area
5 = 30µin/0,76µm gold min., tin/lead in crimp area
6 = Gold Flash, tin/lead in crimp area

TERMINAL FORM
0 = Chain
1 = Loose

WIRE RANGE
0 = 24-28 AWG
1 = 28-32 AWG

(ALL WITH 50µin/1,27µm. MIN DUCTILE NICKEL UNDERPLATE OVERALL)

Insertion/Extraction Tool	
Single-Ended	82007-0200
Double-Ended	82007-0199

*For application tooling please contact factory

Dimensions

Wire Range	Dim "W"	Dim "X"	Dim "Y"	Dim "Z"
24-28	.062 1,57	.059 1,50	.080 2,03	.072 1,83
28-32	.045 1,14	.042 1,07	.060 1,52	.051 1,30

D-Subminiature High Density Crimp Connector

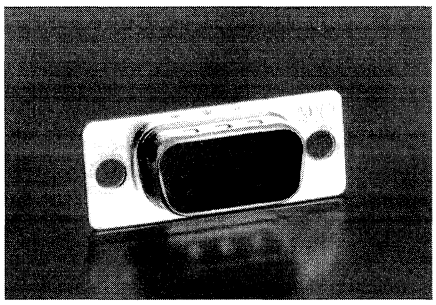
87119 Series Plug Housing

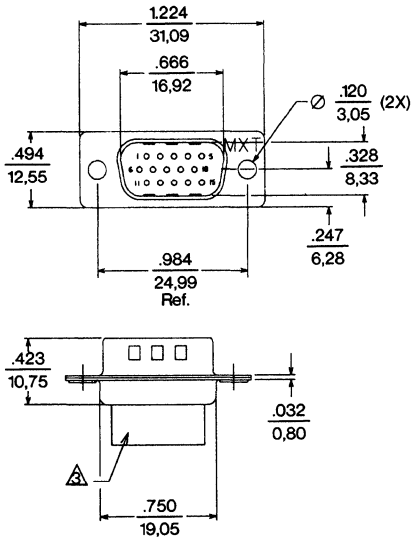
- Grounding indents in tin-plated metal shell ensure reliable ground connection
- Shell size E (#1)
- 15 circuit
- Intermateable with industry standard high density D-Subminiature connectors or shell size E (#1)
- Accepts pin contact series 87115

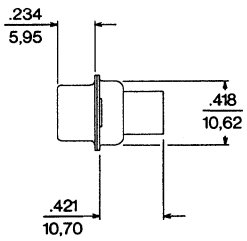
Specifications:

Housing: Glass-filled UL 94V-0 polyester

Shell: Tin plated steel







inches
mm

Ordering Information

Circuit Size	Order No.
15	87119-0001

87115 Series Crimp Terminal, Plug

- Available in chain or loose form
- Wire gauge AWG 24-32
- Selective gold plating in contact area

Specifications:

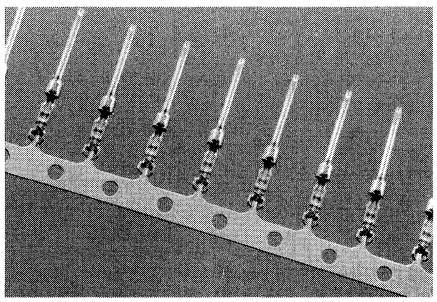
Terminal material: Brass

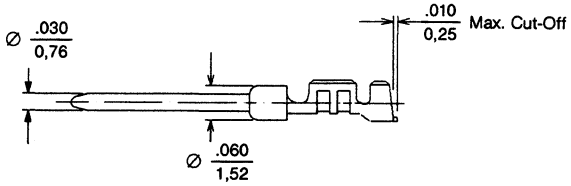
Contact current rating: 3 amps max.

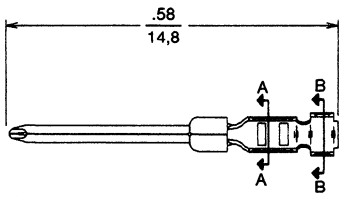
Dielectric withstanding voltage: 1000 VAC

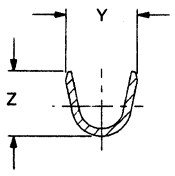
Contact resistance: 15 milliohms max.

Insulation resistance: 5000 megohms min.

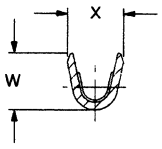








Section B-B



Section A-A

Application Tooling:
Contact Factory for TM80 Stripper/Crimper

Ordering Information

Order Number Formula
87115 - 0 X X X

PLATING CODE
Select Gold
4 = 0,38µm/15µin min., tin/lead in crimp area
5 = 0,76µm/30µin min., tin/lead in crimp area
6 = Gold flash, tin/lead in crimp area

TERMINAL FORM
0 = Chain
1 = Loose

WIRE RANGE
0 = 24-28 AWG
1 = 28-32 AWG

(ALL WITH 50µin/1,27µm. MIN DUCTILE NICKEL UNDERPLATE OVERALL)

Insertion/Extraction Tool	
Single-Ended	82007-0200
Double-Ended	82007-0199

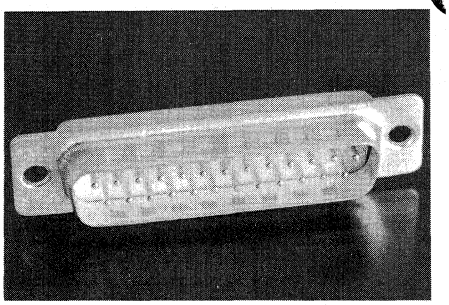
*For application tooling please contact factory

Dimensions

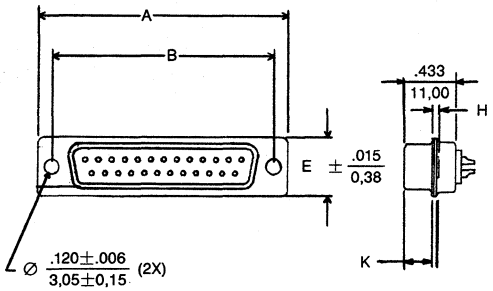
Wire Range	Dim "W"	Dim "X"	Dim "Y"	Dim "Z"
24-28	.062 1,57	.059 1,50	.080 2,03	.072 1,83
28-32	.045 1,14	.042 1,07	.060 1,52	.051 1,30

D-Subminiature Connectors With Machined Solder Cup Contacts

87138 Series Plug Assembly



- UL 94 V-0 PBT housing
- Shells available with tin or zinc chromate plating
- 120" diameter mounting hole
- For other face hardware options contact factory



Ordering Information

Order Number Formula
D-Subminiature Plug with **Machined** Solder Cup Contacts
87138 - X X X 0

SHELL OPTIONS
0 = Tin plated
1 = Zinc chromate plated

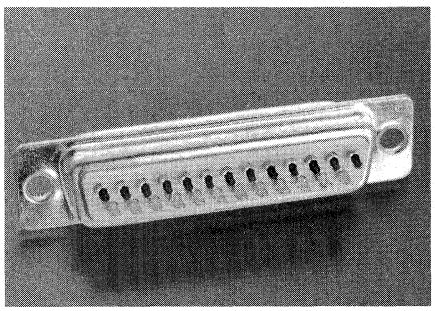
CKT. SIZE
0 = 9
1 = 15
3 = 25
4 = 37
5 = 50

CONTACT PLATING
0 = Gold Flash overall
1 = 15 µin. gold in contact area; flash overall
2 = 30 µin. gold in contact area; flash overall

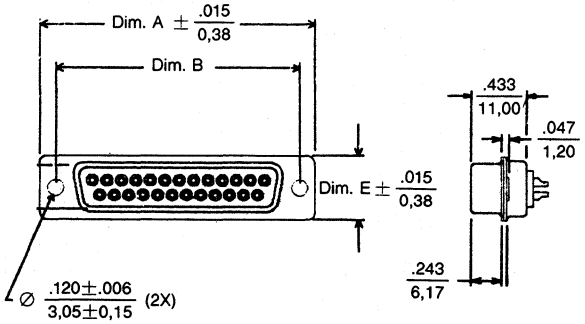
Dimensions

Part No.	No. of Circuits	Dim. A	Dim. B	Dim. E	Dim. H	Dim. K
87138-X0XX	9	1.21 30,8	0.98 25,0	.494 12,55	.047 1,20	.235 5,97
87138-X1XX	15	1.54 39,1	1.31 33,3	.494 12,55	.047 1,20	.235 5,97
87138-X2XX	19	1.89 48,0	1.52 38,7	.494 12,55	.047 1,20	.235 5,97
87138-X3XX	25	2.09 53,0	1.85 47,0	.494 12,55	.059 1,50	.230 5,84
87138-X4XX	37	2.73 69,3	2.50 63,5	.494 12,55	.059 1,50	.230 5,84
87138-X5XX	50	2.63 66,9	2.40 61,1	.605 15,40	.059 1,50	.230 5,84

87137 Series Receptacle Assembly



- UL 94 V-0 PBT housing
- Shells available with tin or zinc chromate plating
- .120" diameter mounting hole
- For other face hardware options contact factory



Ordering Information

Order Number Formula
D-Subminiature Receptacle with **Machined** Solder Cup Contacts
87137 - X X X 0

SHELL OPTIONS
0 = Tin plated
1 = Zinc chromate plated

CKT. SIZE
0 = 9
1 = 15
3 = 25
4 = 37
5 = 50

CONTACT PLATING
0 = Gold Flash overall
1 = 15 µin. gold in contact area; flash overall
2 = 30 µin. gold in contact area; flash overall

Dimensions

Part No.	No. of Circuits	Dim. A	Dim. B	Dim. E
87137-X0XX	9	1.21 30,8	0.98 25,0	.494 12,55
87137-X1XX	15	1.54 39,1	1.31 33,3	.494 12,55
87137-X2XX	19	1.89 48,0	1.52 38,7	.494 12,55
87137-X3XX	25	2.09 53,0	1.85 47,0	.494 12,55
87137-X4XX	37	2.73 69,3	2.50 63,5	.494 12,55
87137-X5XX	50	2.63 66,9	2.40 61,1	.605 15,40

Environmental Connectors

Contents



SPIRIT™

Modular Environmental Connector System 2P-18P

ADVANTAGE™

High Performance Control Connectors 19P-32P

MICRO-C™

Miniature Connectors for Rugged Environments 33P-36P

MINI-C™

Quality Molded Connectors 37P-39P

MIL-C™

Affordable Backshells for MIL Spec Connectors 41P-44P

Molex Industrial Interfaces, Inc. Electrical Distributors 45P-46P

P

molex industrial interfaces, inc.
affordable connectors for rugged environments
641 North Poplar Street Orange, California 92668 (714) 937-9393 FAX (714) 978-9107

Spirit


The Modular Environmental Connector System
industrial interfaces inc
affordable connectors for rugged environments

Spirit Connector Specifications

1.0 AGENCY APPROVALS

1.1 NATIONAL ELECTRIC CODE: SPIRIT connectors conform to the NEC if applied within the constraints of the code. SPIRIT also complies with "Hard Usage" and "Extra Hard Usage" portable cord applications.

1.1 UNDERWRITERS LABORATORIES: SPIRIT series connectors are recognized under the Underwriters Laboratories Component Recognition Program. File: E81982(N).

1.2 CANADIAN STANDARDS ASSOCIATION: SPIRIT series connectors are certified by CSA under File: LR56804-1,-2,-3.

1.3 OTHER:

1.31 SPIRIT conforms to the JIC and Machine Tool Standard NFPA79.

1.32 SPIRIT meets NEMA 4X, enclosure requirements.

1.33 SPIRIT 600V inserts meet the spacing requirements of VDE.
(3mm through air, 4mm over surface)

2.0 MECHANICAL

2.1 CORD STRAIN RELIEF: 35 pound minimum throughout range per UL 514.

2.2 LIQUID-TIGHT CONDUIT STRAIN RELIEF: 150 pound minimum per UL 514.

2.3 TERMINAL CRIMP STRENGTHS: SPIRIT values exceed UL 486 for all wire gages specified.

2.4 MATING CYCLES: 1000 mate/unmate cycles without excessive wear.

2.5 SHOCK: 50 G minimum, all planes. Coupling nut is spring suspended to resist impact damage.

2.6 VIBRATION: Complies with MIL STD 202F, Test Method 204, Test Condition B. Coupling nut is spring loaded to resist loosening under vibration.

3.0 ELECTRICAL

3.1 RATINGS:

1) Voltage rating of each insert is stated as AC DC values.

2) Current ratings are determined by the bulk temperature rise, including ambient, not exceeding the insert temperature rating, which is 90°C. In general, the connectors are capable of carrying the currents of the SO Cable they are designed to accommodate. The NEC Tables on Current Ratings of Wires in Conduit also may be used as reference to allowable currents.

CURRENT RATINGS CONSERVATIVE (AMPS)—ALL CIRCUITS

CIRCUITS	TERMINAL SIZE						
	#8	#10	#12	#14	#16	#18	#20
2	40	30	25	18	13	10	7
3	40	25	20	15	10	7	5
4-6	35	20	16	12	8	6	4
7-24	—	17.5	14	10.5	7	5	3.5
25-42	—	15	12	9	6	4	3
43+	—	12.5	10	7.5	5	3.5	2.5

In specific applications larger currents may be adequately handled by a few circuits without difficulty, but in no instances should more than the following maximums be applied to the terminals:

TERMINAL	ABSOLUTE MAX CURRENT (AMPS)
#8	50
#10 or #12	35
#14 or #16	15
#18 or #20	10

Consult the factory for advice if the application is questionable. In no instance should the bulk temperature exceed 90°C including ambient when max. current is applied.

3) All ratings apply to applications where the connector is not disengaged under load. Consult the factory for advice if the application requires disconnecting under load.

3.2 DIELECTRIC WITHSTAND: Conforms to UL 498. Tested at 1000 volts plus twice rated voltage for 1 minute between terminals and terminals to the shell.

3.3 INSULATION RESISTANCE: 5000 megohms typical at 25°C, 40-60% R.H.

3.4 MILLIVOLT DROP: Voltage probes located ¼" away from crimp barrel.

TERMINAL	WIRE	CURRENT	MV DROP
#16 TIN	#16 AWG	1 AMP	1.5 MV
#20 GOLD	#20 AWG	1 AMP	3.1 MV

4.0 ENVIRONMENTAL:

4.1 TEMPERATURE: -40°C to +90°C (-40°F to +194°)

4.2 HUMIDITY: 100 Megohms min. insulation resistance after 96 hours of 95-100% R.H. at 100°C (MIL STD 202F Test Method 103B Condition B)

4.3 MOISTURE SEALS: No water enters electrical chamber when subjected to water jet spray per UL514. Applies to mated or unmated connectors without dust caps. Dust caps afford additional seal protection as well as preventing entry of mud, chips & other debris.

4.4 CORROSION: No exposure of base metal evident after 500 hours in salt spray per MIL-STD 1344. Shells are inert to most caustics.
Hardcoat finish is approved for off shore marine duty.

4.5 CHEMICAL RESISTANCE: Inserts impervious to most oils, alcohols, fuels, glycols, salts, soaps and mild alkalis. Consult factory for specific applications.

SPIRIT SERIES connectors are recognized under the Underwriters Laboratories Component Recognition Program File E81982(N)

Canadian Standards Association

SPIRIT SERIES connectors are certified by Canadian Standards Association under File LR56804-1, -2, -3.

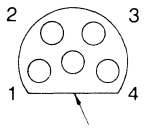
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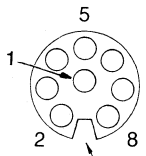
Insert Configuration Guide

Socket Front Shown
Ground Circuit is #1 Position
Unless Otherwise Noted

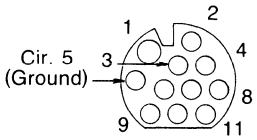
Spirit 17



"A" Key
5 Circuit
600V
#14 to #24 AWG
COAX

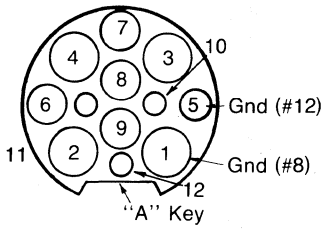


"A" Key
8 Circuit
250V
#14 to #24 AWG
COAX

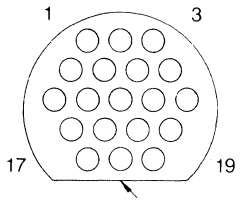


"A" Key
11 Circuit
250V
10 #18 to 24 AWG
1 #14 to 24 AWG
COAX

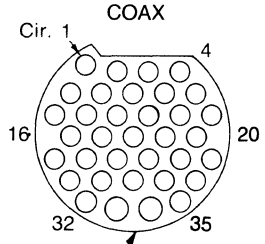
Spirit 30



"A" Key
12 Circuit
600V
4 #8 to #10 AWG
5 #10 to #16 AWG
3 #14 to #24 AWG
COAX

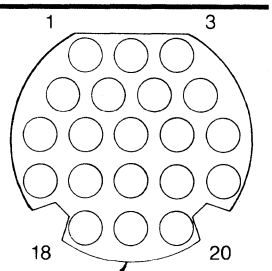


"A" Key
19 Circuit
600V
#14 to #24 AWG
COAX

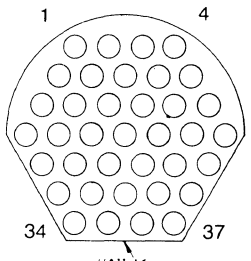


"A" Key
35 Circuit
250V
33 #18 to 24 AWG
2 #14 to 24 AWG
COAX

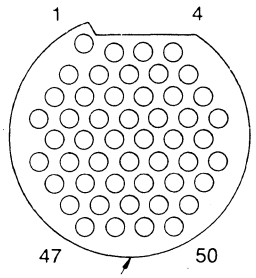
Spirit 36



"A" Key
20 Circuit
600V
#10 to #16 AWG

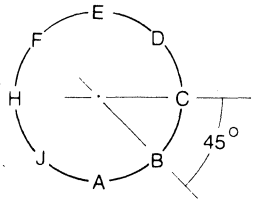


"A" Key
37 Circuit
600V
#14 to #24 AWG
COAX



"A" Key
50 Circuit
250V
#18 to #24 AWG

Key Progression
(view from socket rear)



The SPIRIT Insert Configuration Guide is intended to assist in the selection of a proper combination of wire gauge and number of circuits required. Unique features of the SPIRIT design allow for the use of a single insert for many applications.

ENVIRONMENTAL SEALING is assured with a newly developed UL recognized thermoplastic elastomer that combines the low durometer sealing characteristics of rubber with the long time aging properties of plastic. Double shrouding by the insert and shell walls provide redundant sealing.

ADDED SEALING CAPABILITY is provided by individual elastomer diaphragms covering each terminal cavity. The diaphragm is pierced only when a terminal is required. If less than the total number of terminal cavities are used the integrity of seal is maintained without the need of dummy pins or sockets.

EQUIPMENT GROUNDING is achieved through a raised terminal in the socket insert. A make first and break last condition, insuring a safe ground before engaging or disengaging live circuits, is forever present without the use of longer ground pins.

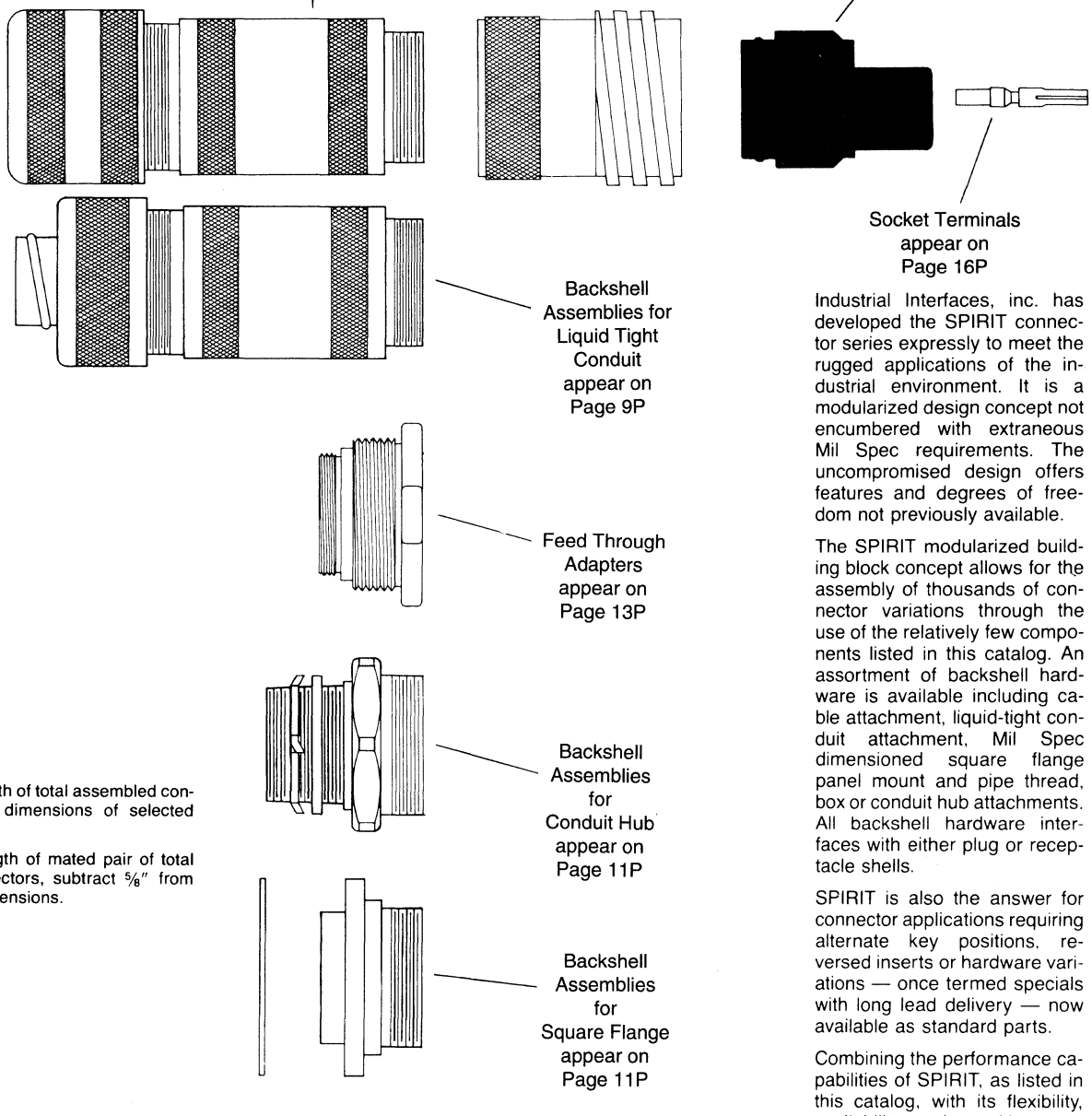
LOW INSERTION FORCE TERMINAL LOCK through expandable elastomer design creates positive locking and insures relatively low insertion forces. Socket terminals do not require lead-in guide pins. No delicate locking tangs to distort or break. Maximum holding force is realized when backshell is fully assembled to frontshell.

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Spirit

The Modular Environmental Connector System



- To determine length of total assembled connector, total "L" dimensions of selected components.
- To determine length of mated pair of total assembled connectors, subtract 5/8" from total of all "L" dimensions.

Industrial Interfaces, inc. has developed the SPIRIT connector series expressly to meet the rugged applications of the industrial environment. It is a modularized design concept not encumbered with extraneous Mil Spec requirements. The uncompromised design offers features and degrees of freedom not previously available.

The SPIRIT modularized building block concept allows for the assembly of thousands of connector variations through the use of the relatively few components listed in this catalog. An assortment of backshell hardware is available including cable attachment, liquid-tight conduit attachment, Mil Spec dimensioned square flange panel mount and pipe thread, box or conduit hub attachments. All backshell hardware interfaces with either plug or receptacle shells.

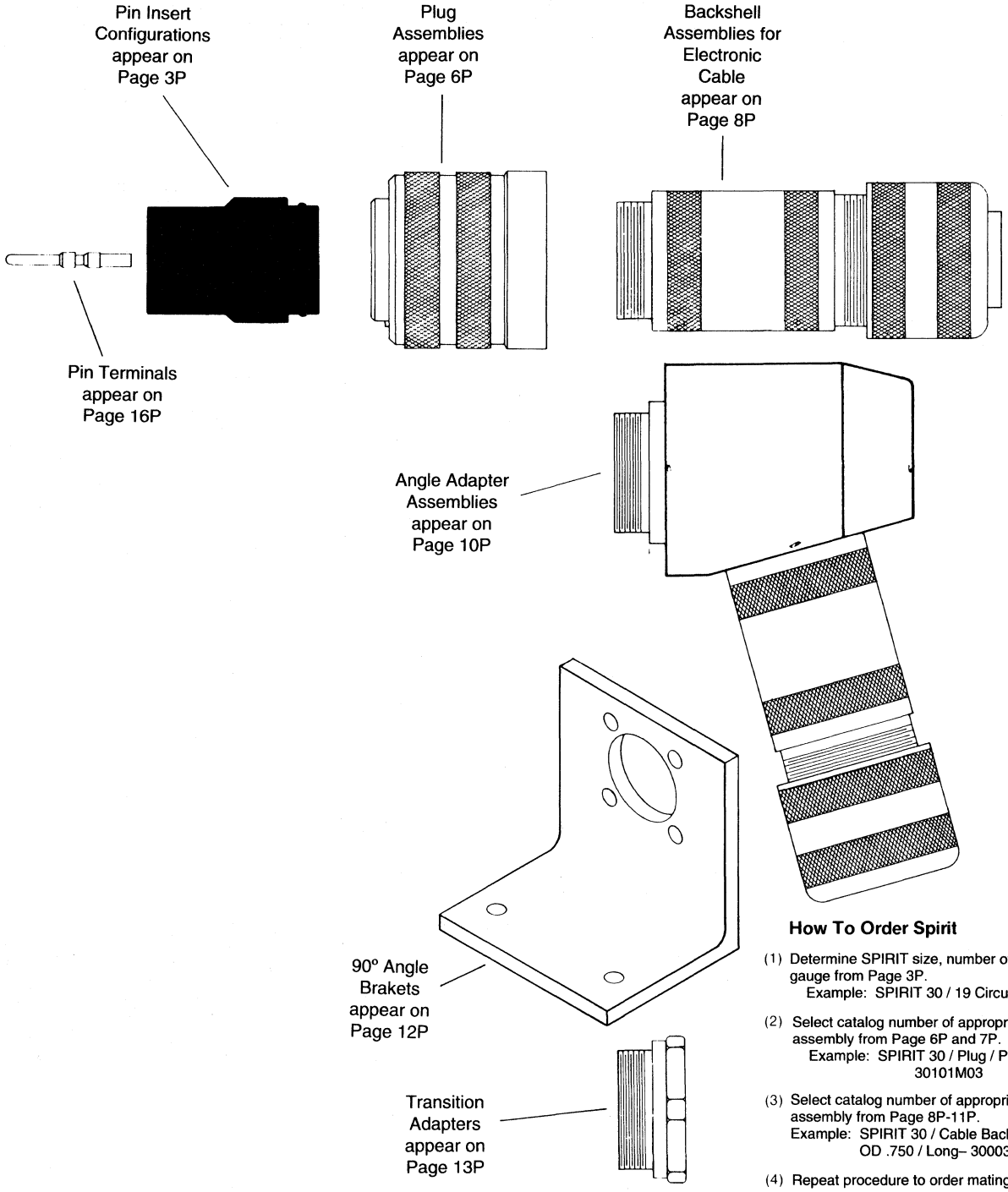
SPIRIT is also the answer for connector applications requiring alternate key positions, reversed inserts or hardware variations — once termed specials with long lead delivery — now available as standard parts.

Combining the performance capabilities of SPIRIT, as listed in this catalog, with its flexibility, availability and resulting cost economies clearly defines the express design mandate of Industrial Interfaces, inc.

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Environmental Connectors



How To Order Spirit

(1) Determine SPIRIT size, number of circuits and wire gauge from Page 3P.
Example: SPIRIT 30 / 19 Circuit / 16 AWG

(2) Select catalog number of appropriate Front-shell assembly from Page 6P and 7P.
Example: SPIRIT 30 / Plug / Pin Insert – 30101M03

(3) Select catalog number of appropriate Backshell assembly from Page 8P-11P.
Example: SPIRIT 30 / Cable Backshell / Jacket OD .750 / Long– 30003M03

(4) Repeat procedure to order mating assembly.

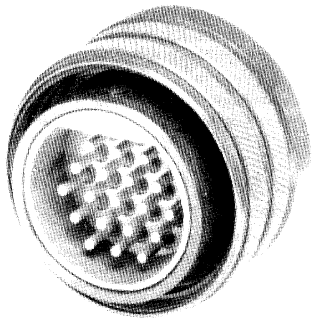
NOTE: SPIRIT mated pair consists of four catalog numbers.

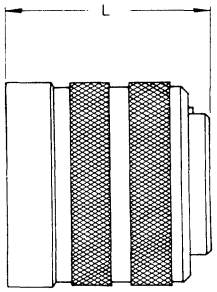
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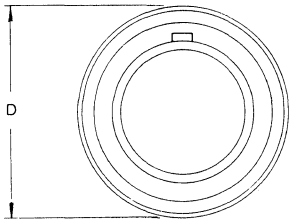
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Spirit Front Shell Assemblies

Plug Assemblies







MAX. NO. OF CIRCUITS	AWG WIRE RANGE	SHELL SIZE	TERMINAL FINISH	VOLTAGE RATING	WITH PIN INSERT	WITH SOCKET INSERT
5	14-18	17	TIN	600	17201M03	17203M03
5	16-20	17	TIN	600	17101M03	17103M03
8	14-18	17	TIN	250	17205M03	17207M03
8	16-20	17	TIN	250	17105M03	17107M03
11	18-22	17	TIN	250	17309M03	17311M03
11	20-24	17	GOLD	250	17109M03	17111M93
12	(4) 8-10 (5) 12-16 (3) 16-20	30	TIN	600	30151M03	30153M03
*12	(4) 8-10 (5) 10-16 (3) 14-24	30	TIN TIN BOTH	600	30951M03	30953M03
19	14-18	30	TIN	600	30201M03	30203M03
19	16-20	30	TIN	600	30101M03	30103M03
35	18-22	30	TIN	250	30309M03	30311M03
35	20-24	30	GOLD	250	30109M03	30111M03
20	10-14	36	TIN	600	36205M03	36207M03
20	12-16	36	TIN	600	36105M03	36107M03
37	14-18	36	TIN	600	36201M03	36203M03
37	16-20	36	TIN	600	36101M03	36103M03
50	18-22	36	TIN	250	36309M03	36311M03
50	20-24	36	GOLD	250	36109M03	36111M03

Unless otherwise indicated, assemblies include pre-packaged frontshell, insert terminals and instruction sheet. Terminal package includes 10% spares. See Page 16P for required insertion tool kits and removal tool kits. All frontshells require a backshell to complete the connector half.

***Indicates assembly without terminals. See Page 15P for selecting guides of screw machine and coaxial terminals.**

SHELL SIZE	DIMENSIONS	
	L	D
17	1.275	1.312
30	1.275	1.975
36	1.275	2.250

SPIRIT front shell assemblies are designed to accept all inserts of the appropriate shell size. Shell material is 6061-T6 machined aluminum dark hardcoated with teflon sealcoat for MAXIMUM CORROSION PROTECTION with built-in thread lubrication.

ACME COUPLING threads fully mate and unmate in less than 2½ turns. Spring loaded coupling nut resists vibration.

IN FIELD INSERT KEYING is achieved by alignment of a molded key letter on the rear of the insert with an indicator on the rear of the shell during assembly. Eight alternate keying positions are provided.

RUGGEDNESS throughout with coarse mating threads. Plug key protection by heavy wall sections. Double shrouding by the insert and shell walls provide added protection. Coupling nut is spring suspended to resist impact shock.

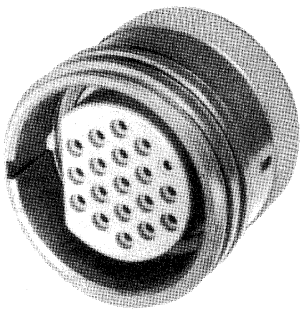
Please refer to Page 16P for terminal insertion and removal tools.

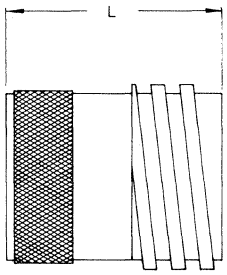
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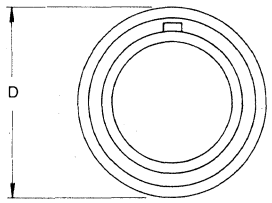
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Spirit Front Shell Assemblies

Receptacle Assemblies







SHELL SIZE	DIMENSIONS	
	L	D
17	1.375	1.187
30	1.375	1.750
36	1.375	2.000

SPIRIT front shell assemblies are designed to accept all inserts of the appropriate shell size. Shell material is 6061-T6 machined aluminum dark hardcoated with teflon sealcoat for MAXIMUM CORROSION PROTECTION with built-in thread lubrication.

ACME COUPLING threads fully mate and unmate in less than 2½ turns.

IN FIELD INSERT KEYING is achieved by alignment of a molded key letter on the rear of the insert with an indicator on the rear of the shell during assembly. Eight alternate keying positions are provided.

Please refer to Page 16P for terminal insertion and removal tools.

MAX. NO. OF CIRCUITS	AWG WIRE RANGE	SHELL SIZE	TERMINAL FINISH	VOLTAGE RATING	WITH SOCKET INSERT	WITH PIN INSERT
5	14-18	17	TIN	600	17204M03	17202M03
5	16-20	17	TIN	600	17104M03	17102M03
8	14-18	17	TIN	250	17208M03	17206M03
8	16-20	17	TIN	250	17108M03	17106M03
11	18-22	17	TIN	250	17312M03	17310M03
11	20-24	17	GOLD	250	17112M03	17110M03
12	(4) 8-10 (5) 12-16 (3) 16-20	30	TIN	600	30154M03	30152M03
*12	(4) 8-10 (5) 10-16 (3) 14-24	30	TIN TIN BOTH	600	30954M03	30952M03
19	14-18	30	TIN	600	30204M03	30202M03
19	16-20	30	TIN	600	30104M03	30102M03
35	18-22	30	TIN	250	30312M03	30310M03
35	20-24	30	GOLD	250	30112M03	30110M03
20	10-14	36	TIN	600	36208M03	36206M03
20	12-16	36	TIN	600	36108M03	36106M03
37	14-18	36	TIN	600	36204M03	36202M03
37	16-20	36	TIN	600	36104M03	36102M03
50	18-22	36	TIN	250	36312M03	36310M03
50	20-24	36	GOLD	250	36112M03	36110M03

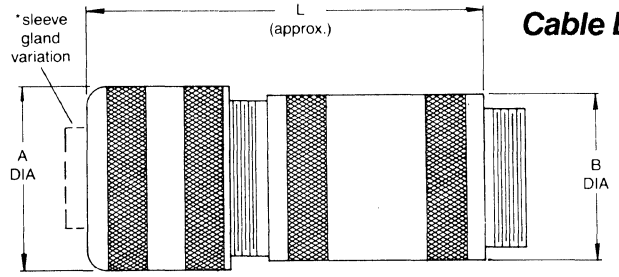
Unless otherwise indicated, assemblies include pre-packaged frontshell, insert terminals and instruction sheet. Terminal package includes 10% spares. See Page 16P for required insertion tool kits and removal tool kits. All frontshells require a backshell to complete the connector half.

***Indicates assembly without terminals. See Page 15P for selecting guides of screw machine and coaxial terminals.**

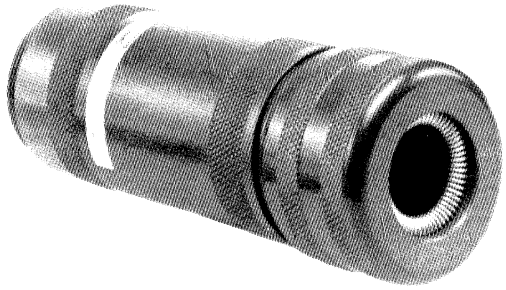
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Spirit Backshell Assemblies



Cable Backshells

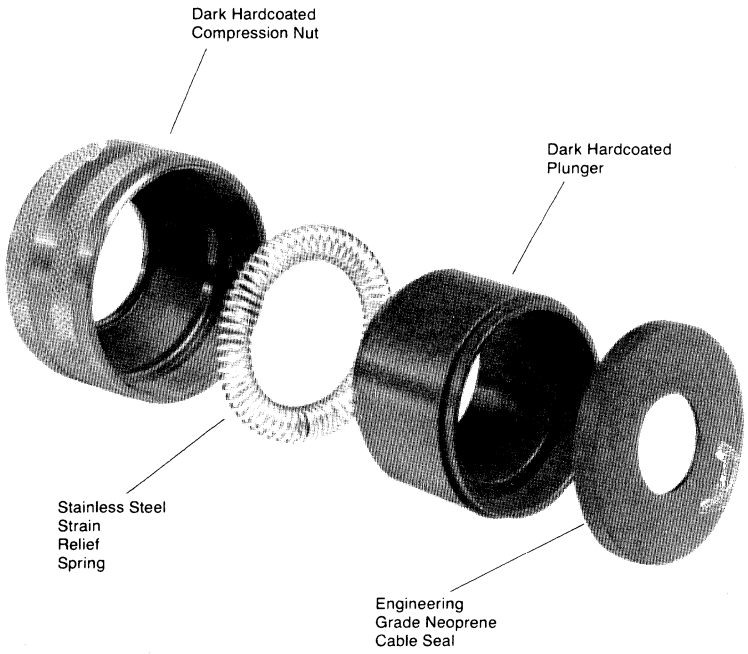


SHELL SIZE	CABLE RANGE (INCHES)	LONG BACKSHELL	SHORT BACKSHELL	DIMENSIONS (inches) A	B	L (long)	L (short)
17	*.250 - .350	17037MO3	17038MO3	1.156	1.050	2¼	1⅝
17	.350 - .500	17003MO3	17004MO3	1.156	1.050	2¼	1⅝
30	*.450 - .700	30037MO3	30038MO3	1.750	1.625	4	2⅞
30	.700 - .950	30003MO3	30004MO3	1.750	1.625	4	2⅞
30	.950 - 1.150	30053MO3	30054MO3	1.750	1.625	4	2⅞
36	*.650 - .900	36037MO3	36038MO3	2.000	1.875	5¼	3¼
36	.900 - 1.15	36003MO3	36004MO3	2.000	1.875	5¼	3¼
36	1.150 - 1.350	36053MO3	36054MO3	2.000	1.875	5¼	3¼
36	1.350 - 1.425	36067MO3	36068MO3	2.000	1.875	5¼	3¼

***Sleeve Gland Variation**

Assembly includes pre-packaged backshell, cable seal, strain relief spring and compression nut, fully assembled.

See Page 14P for cable range reducers.



SPIRIT cable backshells achieve extraordinary sealing and strain relief through the independent action of expandable elastomers and spring pressure loading. The stainless steel strain relief spring closes around the cable as the compression nut is threaded downward. High but controlled pressure is applied to the cable yielding superior holding power without damage to the cable. Pulling the cable increases the spring force on the cable further enhancing the holding power when needed.

Sealing is accomplished by an expandable elastomer diaphragm which conforms to the cable diameter when inserted into the shell. Wide-range cable diameter performance is possible without an assortment of sealing grommets typical in conventional designs.

For smaller diameter cable, such as electronic cable or for discrete wire applications, a cable sleeve gland variation is available. The strain relief action is similar but in this case, the seal is obtained by the spring compressing the sleeve gland around the cable or wire bundle.

Backshell assemblies are threaded to front shell assemblies. Hand tightening the backshell pressurizes the insert in the front shell and provides the peripheral seal. NO WRENCHING REQUIRED.

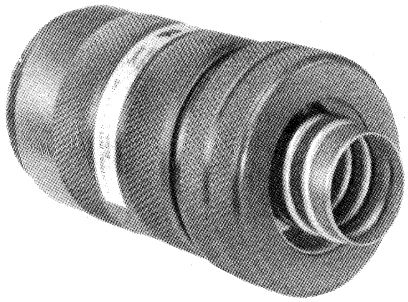
To allow the SPIRIT Cable Backshells to be used with very small diameter electronic cable, NORPORENE THERMOPLASTIC ELASTOMER bushings are available See Cable Range Reducers listed on page 14P.

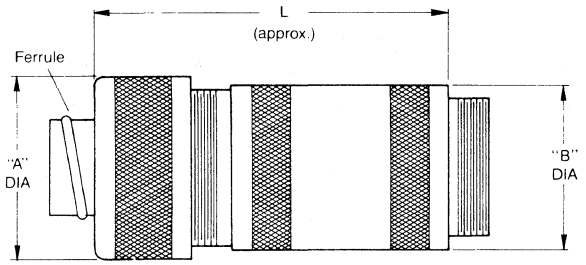
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Spirit Backshell Assemblies

Liquid Tight Conduit Backshells





SHELL SIZE	CONDUIT TRADE SIZE	BACKSHELL STYLE	LONG BACKSHELL	SHORT BACKSHELL	DIMENSIONS (Inches)			
					A	B	L (long)	L (short)
17	3/8	M	17007M03	17006M03	1.156	1.050	2	1 3/8
17	1/2	M	17012M03	17011M03	1.156	1.050	2	1 3/8
30	1/2	M	30064M03	30063M03	1.750	1.625	3 5/8	2 1/2
30	3/4	M	30007M03	30006M03	1.750	1.625	3 5/8	2 1/2
30	1	M	30012M03	30011M03	1.750	1.625	3 5/8	2 1/2
36	3/4	M	36007M03	36006M03	2.000	1.875	4 7/8	2 7/8
36	1	M	36012M03	36011M03	2.000	1.875	4 7/8	2 7/8
17	3/8	R	17062M03	17061M03	1.156	1.050	2 1/4	1 5/8
17	1/2	R	17057M03	17056M03	1.156	1.050	2 1/4	1 5/8
30	1/2	R	30057M03	30056M03	1.750	1.625	4	2 7/8
30	3/4	R	30062M03	30061M03	1.750	1.625	4	2 7/8
36	3/4	R	36057M03	36056M03	2.000	1.875	5 1/4	3 1/4
36	1	R	36062M03	36061M03	2.000	1.875	5 1/4	3 1/4
36	1 1/4	R	N/A	36046M03	2.420	1.875	N/A	2 1/2
17	3/8	T	17062M13	17061M13	1.156	1.050	2 1/4	1 5/8
17	1/2	T	17057M13	17056M13	1.156	1.050	2 1/4	1 5/8
30	1/2	T	30057M13	30056M13	1.750	1.625	4	2 7/8
30	3/4	T	30062M13	30061M13	1.750	1.625	4	2 7/8
36	3/4	T	36057M13	36056M13	2.000	1.875	5 1/4	3 1/4
36	1	T	36062M13	36061M13	2.000	1.875	5 1/4	3 1/4

SPIRIT liquid-tight conduit backshell assemblies will accept direct attachment of various sizes of liquid-tight conduit. Backshells are dimensioned to standard conduit sizes which ELIMINATES TRANSITION ADAPTERS from connector shell to conduit.

Backshells are available for several metallic and non metallic liquid tight conduits. Choose the backshell style you require by referring to conduit composition chart. Then determine the backshell required in the catalog number chart for the style and trade size you require.

Backshell assemblies are threaded to front shell assemblies. Hand tightening the backshell pressurizes the insert to the front shell and achieves maximum holding force. NO WRENCHING REQUIRED.

Assembly includes pre-packaged backshell, plastic seal, liquid-tight conduit ferrule, tie wrap and compression nut, fully assembled.

CONDUIT COMPOSITION	DESCRIPTION	BACKSHELL STYLE	CONDUIT TYPES
Metallic	Plastic Over Metal	M	ALT,AT,CSA,EF,EFL,HC,HEX,LA LOR,LT,OR,UXTL,UA,ZHN
Non-Metallic	Heavy Wall Plastic	M	Polytuff I, Xtra Flex Type 2
Non-Metallic	Nylon Reinforced Rubber	R	CN-P, LMN-P
Non-Metallic	Thin Corrugated Plastic	T	Polytuff II, Xtra Flex Type 1

Shell material is 6061-T6 machined aluminum dark hardcoated with teflon sealcoat for MAXIMUM CORROSION PROTECTION with built in thread lubrication.
See Specifications on Page 18P.

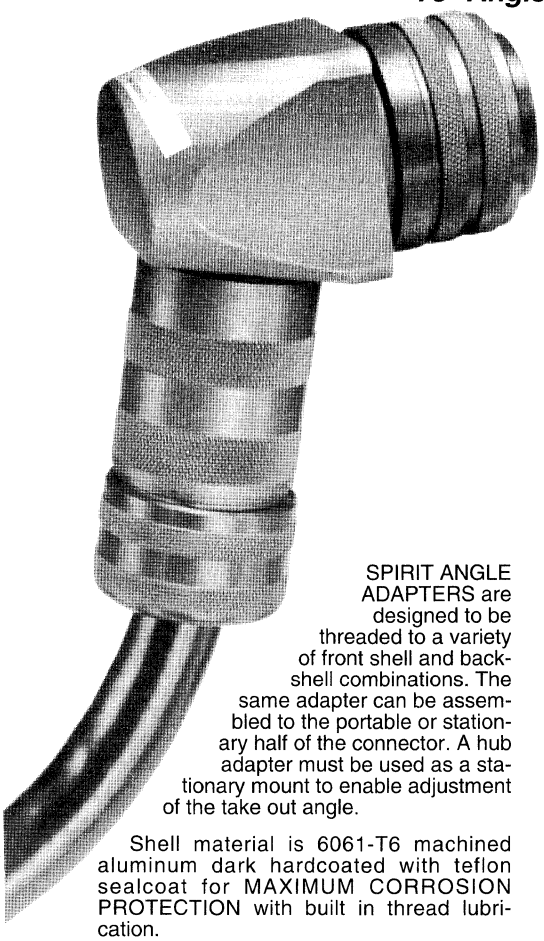
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Spirit Accessories

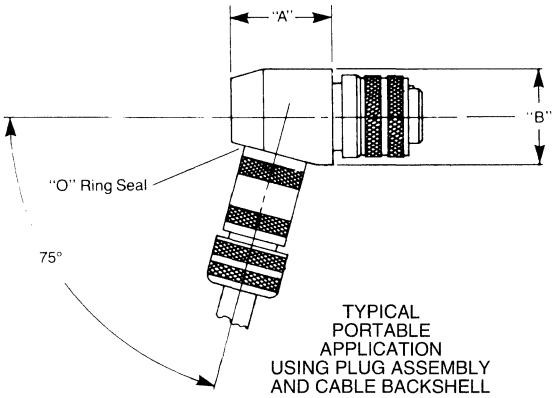
75° Angle Adapter

FOR USE IN HUB MOUNT SYSTEMS
CANNOT BE USED WITH SQUARE FLANGE BACKSHELL

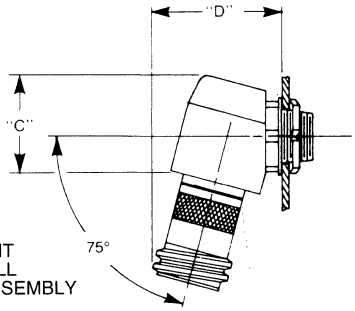


SPIRIT ANGLE ADAPTERS are designed to be threaded to a variety of front shell and backshell combinations. The same adapter can be assembled to the portable or stationary half of the connector. A hub adapter must be used as a stationary mount to enable adjustment of the take out angle.

Shell material is 6061-T6 machined aluminum dark hardcoated with teflon sealcoat for MAXIMUM CORROSION PROTECTION with built in thread lubrication.



TYPICAL PORTABLE APPLICATION USING PLUG ASSEMBLY AND CABLE BACKSHELL



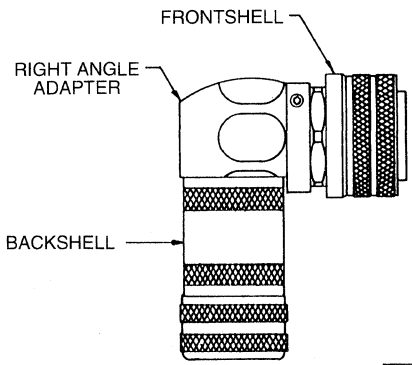
TYPICAL STATIONARY APPLICATION USING CONDUIT HUB BACKSHELL AND RECEPTACLE ASSEMBLY

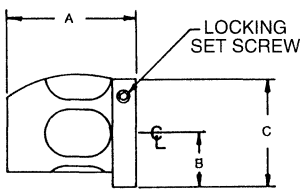
SHELL SIZE	CATALOG NUMBER	A	B	C	D
17	17055M03	1.750	1.500	1.875	1.875
30	30055M03	2.125	2.000	2.234	2.375
36	36055M03	2.375	2.250	2.476	2.750

Assembly includes Angle Shell, "O" Ring Seal and Instruction Sheet.

NOTE: Frontshell and backshell sold separately.

Right Angle Adapter for Portable Frontshells





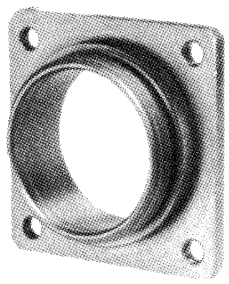
SHELL SIZE	SHELL MATERIAL	CATALOG NUMBER	DIMENSIONS (INCHES) A	B	C
36	ALUM	36075M03	2.68	2.25	1.12

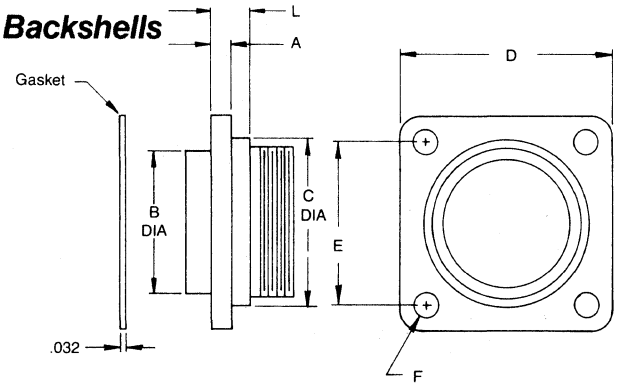
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Spirit Backshell Assemblies

Square Flange Backshells





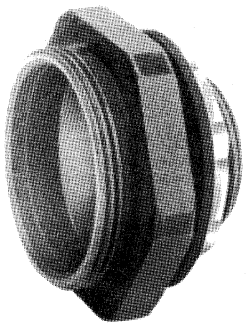
SPIRIT Square Flange Adapters are threaded to front shell assemblies. Hand tightening the adapter pressurizes the insert to the front shell and achieves maximum holding force. NO WRENCHING REQUIRED.

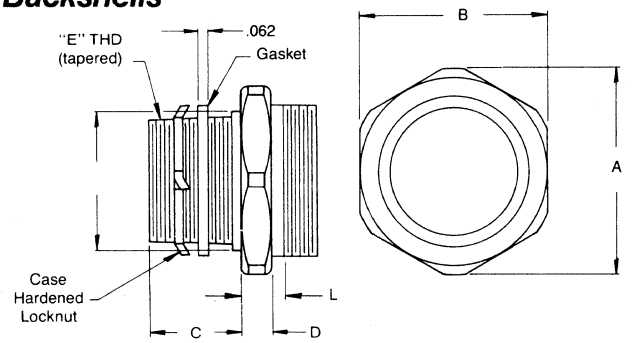
Square flange adapters are designed to MS mounting dimensions to eliminate the need of changing drawings when connector systems are upgraded.

SHELL SIZE	CATALOG NUMBER	A	B	C	D	E	F	L	PANEL MOUNT HOLE DIA.	PANEL MOUNT SCREW SIZE	MIL SPEC REF.
17	17014M03	.125	.850	1.000	1.281	.969	.150	.312	1.030	#6	MS 16
30	30014M03	.125	1.500	1.630	2.000	1.562	.177	.312	1.780	#8	MS 28
36	36014M03	.125	1.720	1.820	2.250	1.750	.209	.312	2.030	#10	MS 32

Assembly includes flange backshell, neoprene gasket, and tie wrap.
To mount flange on inside of panel place gasket on other side and assemble front shell after flange is mounted. Maximum panel thickness for this application is .125 inches.

Conduit Hub Backshells





SPIRIT Conduit Hub Adapters allow for a variety of connector mounting methods. The freedom to select wireway or panel mount through use of a knockout punch; hub or pendant mount; 90° or 45° angle conduit coupling attachment are but a few of the possibilities.

Shell material is 6061-T6 machined aluminum dark hardcoated with teflon sealcoat for MAXIMUM CORROSION PROTECTION with built in thread lubrication.

See Specifications on Page 18P.

SHELL SIZE	TRADE SIZE	CATALOG NUMBER	A	B	C	D	L	E THREAD	PANEL MOUNT HOLE DIAMETER
17	½	17018M03	1¼	1⅛	.556	.212	.312	½ - 14 NPT	.875
30	¾	30018M03	1 61/64	1¾	.600	.275	.375	¾ – 14 NPT	1.109
30	1	30019M03	1 61/64	1¾	.650	.275	.375	1 - 11½ NPT	1.375
36	1	36018M03	2 1/64	2	.650	.396	.496	1 - 11½ NPT	1.375
36	1¼	36019M03	2 1/64	2	.700	.396	.496	1¼ - 11½ NPT	1.734

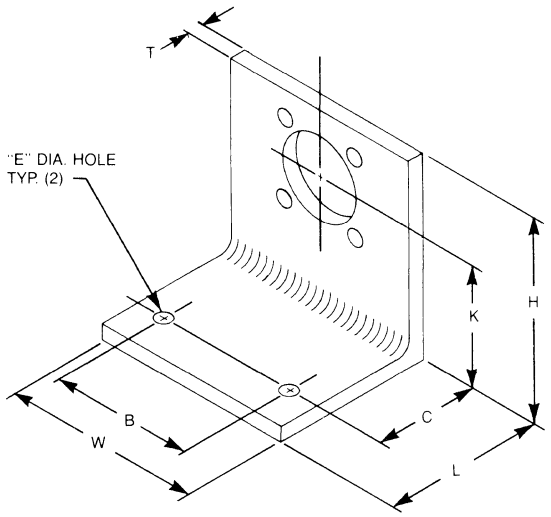
Assembly includes pre-packaged backshell, neoprene gasket, locknut and tie wrap.

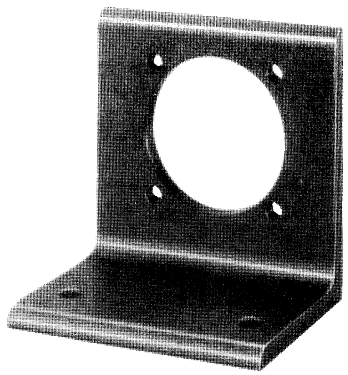
NOTE: Do not use with 30151M03 or 30951M03. Improper spacings of power conductors can result.

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Spirit Accessories

90° Angle Brackets



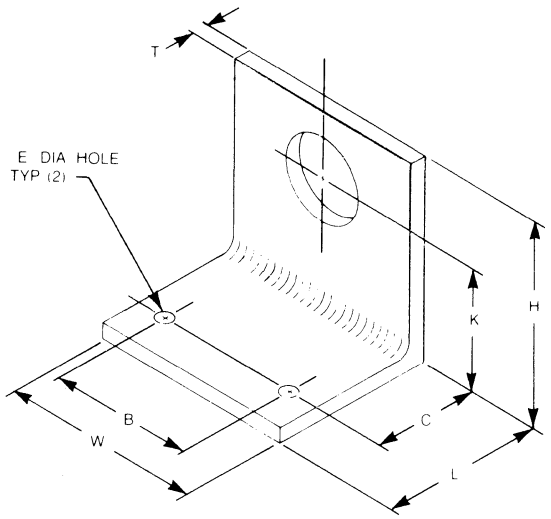


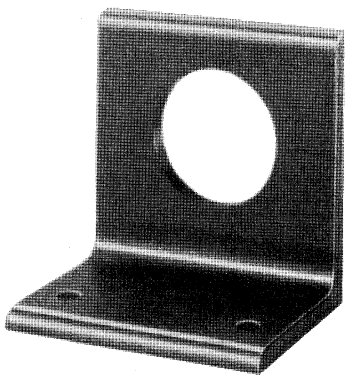
Flange Mount

SHELL SIZE	DESCRIPTION	CATALOG NUMBER	DIMENSIONS T	W	L	K	H	E	C	B
17	FLANGE	98201M01	.187	2.50	3.00	1.5	2.50	.275	1.50	1.75
30	FLANGE	98202M01	.250	3.50	2.50	2.0	3.50	.275	1.75	2.50
36	FLANGE	98203M01	.250	3.50	2.50	2.0	3.50	.275	1.75	2.50

Angle Brackets are available for either flange mount applications or for feed through adapter mountings. The flange mount would be used where seal on the mounted side is not required. The feed through adapter mounting would be used where seal is required on both sides of the bracket. An example would be an in-line cable connection on the external frame of a machine.

Material is aluminum angle stock black anodized.





Feed Through Adapter Mount

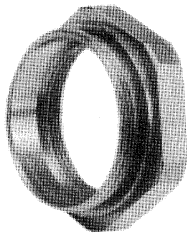
SHELL SIZE	DESCRIPTION	CATALOG NUMBER	KNOCKOUT TRADE SIZE	DIMENSIONS T	W	L	K	H	E	C	B
30	FEED THROUGH	98204M01	1½"	.250	3.50	2.50	2.0	3.50	.275	1.75	2.50
36	FEED THROUGH	98205M01	2"	.250	3.50	2.50	2.0	3.50	.275	1.75	2.50

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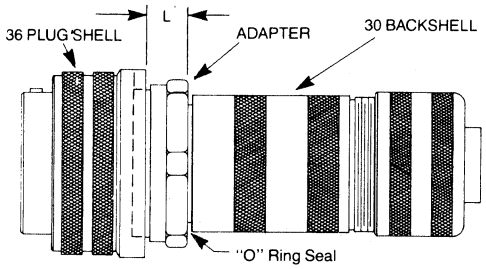
Spirit Accessories

Transition Adapters



Spirit transition adapters permit the use of different frontshell and backshell sizes allowing increased cable and conduit ranges. This adapter assembles between frontshell and backshell.

Shell material is 6061-T6 machined aluminum dark hardcoated with teflon sealcoat for MAXIMUM CORROSION PROTECTION with built in thread lubrication.
See Specifications on Page 18P.

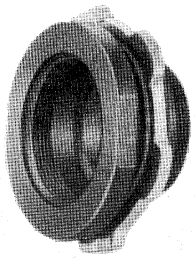


CATALOG NO.	DESCRIPTION	FRONTSHELL SIZE	BACKSHELL SIZE	L
30087M03	Expansion Adapter	30	36	.500
36045M03	Reducing Adapter	36	30	.450

Assemblies include "O" Ring Seal and Instructions.

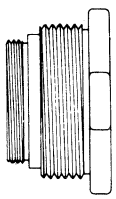
Feed Through Mounting Adapters

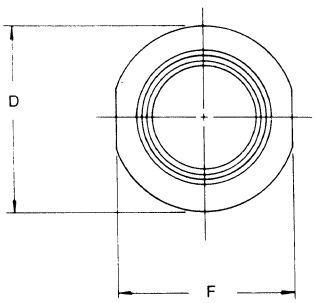
FOR USE WITH RECEPTACLE ASSEMBLIES



To allow pre-assembled connectors using receptacle front shells and cable or liquid-tight conduit backshells to be mounted on frames, bulkheads, or NEMA enclosures without disturbing connector assembly.

SPIRIT 30 and SPIRIT 36 now offer advantages when installing prefabricated cable assemblies or when connecting "in the open" with seals required on both sides.





SHELL SIZE	CATALOG NUMBER	KNOCKOUT TRADE SIZE	MOUNTING HOLE DIAM.	DIMENSIONS D	F
30	30069M03	1½"	1.937	2¼"	2⅛"
36	36069M03	2"	2.406	2⅝"	2½"

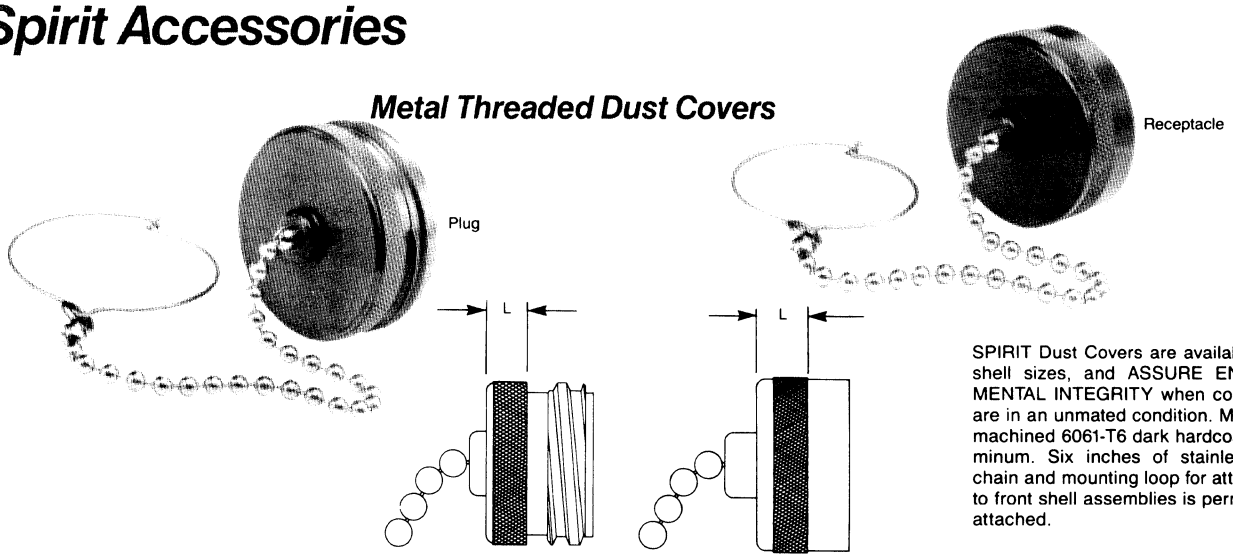
Assembly includes locknut.

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Spirit Accessories

Metal Threaded Dust Covers



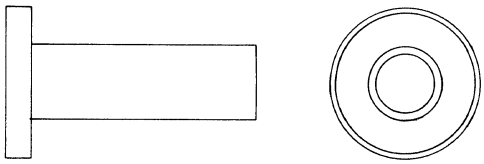
SPIRIT Dust Covers are available in all shell sizes, and ASSURE ENVIRONMENTAL INTEGRITY when connectors are in an unmated condition. Material is machined 6061-T6 dark hardcoated aluminum. Six inches of stainless steel chain and mounting loop for attachment to front shell assemblies is permanently attached.

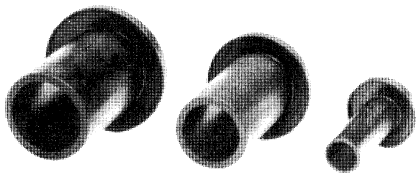
SHELL SIZE	PLUG DUST CAP	RECEPTACLE DUST CAP	L ADDITIONAL LENGTH TO CONNECTOR
17	17043M03	17044M03	3/8
30	30043M03	30044M03	3/8
36	36043M03	36044M03	3/8

Assembly includes Dust Cover, Seals, and stainless steel chain with mounting loop and instruction sheet.

Small Diameter Sleeve Glands

For Field Retrofit of Cable Backshells



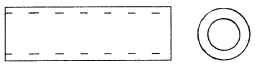


The small diameter Sleeve Gland replaces flat diaphragm glands to accommodate the smaller wire diameters or discrete wire bundles. Sleeve Glands cannot be used on extra large diameter Backshells, (30053M03, 30054M03, 36053M03, 36054M03) due to the utilization of larger plungers and springs.

Cord Ranges & Part Numbers

SHELL SIZE	GLAND PART NUMBER	CABLE RANGE (inches)	FOR USE WITH THE FOLLOWING BACKSHELLS
17	17031MO1	.250-.350	17003M03, 17004M03
30	30031MO1	.450-.700	30003M03, 30004M03
36	36031MO1	.650-.900	36003M03, 36004M03

Cable Range Reducers



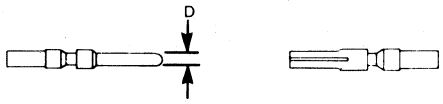


Cable Range Reducers allow the use of very small diameter electronic cable in the SPIRIT cable backshields. The NORPRENE THERMOPLASTIC bushing accessories are available to retrofit existing cable backshells to accept the cable diameters shown.

CATALOG NO.	DESCRIPTION	RANGE	LONG BACKSHELLS	SHORT BACKSHELLS
98130MO1	Bushing—5 Pak	.130—.180	17037MO3	17038MO3
98131MO1	Bushing—5 Pak	.180—.250	17003MO3	17004MO3
98132MO1	Bushing—5 Pak	.200—.250	30037MO3	30038MO3
98133MO1	Bushing—5 Pak	.250—.310	30037MO3	30038MO3
98134MO1	Bushing—5 Pak	.310—.370	30037MO3	30038MO3
98135MO1	Bushing—5 Pak	.370—.440	30037MO3	30038MO3
98136MO1	Bushing—5 Pak	.520—.620	36037MO3	36038MO3

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Terminal Selection Guide



Screw Machined Terminal Description

TERMINAL SIZE	CRIMP RANGE (AWG)	QUANTITY	PIN TERMINAL TIN	PIN TERMINAL GOLD	SOCKET TERMINAL TIN	SOCKET TERMINAL GOLD	DIMENSION D DIAMETER
#8	8-10	5 10 100 1000	90010M00 90010M01 90010M02 90010B01		90011M00 90011M01 90011M02 90011B01		4.0
#10	10-14	5 10 100 1000	90014M00 90014M01 90014M02 90014B01		90015M00 90015M01 90015M02 90015B01		3.0
#12	12-16	5 10 100 1000	90004M00 90004M01 90004M02 90004B01		90005M00 90005M01 90005M02 90005B01		3.0
#14	14-18	5 10 100 1000	90008M00 90008M01 90008M02 90008B01		90009M00 90009M01 90009M02 90009B01		2.0
#16	16-20	5 10 100 1000	90006M00 90006M01 90006M02 90006B01	90006MG0 90006MG1 90006MG2 90006BG1	90007M00 90007M01 90007M02 90007B01	90007MG0 90007MG1 90007MG2 90007BG1	2.0
#18	18-22	5 10 100 1000	90016M00 90016M01 90016M02 90016B01	90016MG0 90016MG1 90016MG2 90016BG1	90017M00 90017M01 90017M02 90017B01	90017MG0 90017MG1 90017MG2 90017BG1	1.5
#20	20-24	5 10 100 1000		90012MG0 90012MG1 90012MG2 90012BG1		90013MG0 90013MG1 90013MG2 90013BG1	1.5

Terminals are screw machined from high performance brass alloys.
Terminals are lubricated for increased mating life and protection from fret corrosion.

Pins and sockets of different sizes with the same D diameter will mate in the same connector.

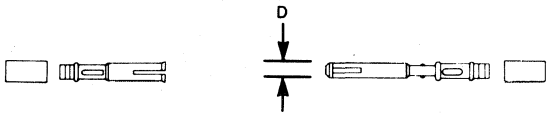
SPIRIT front shell assemblies include the proper compliment of pre-packaged terminals. However, all SPIRIT inserts are capable of accommodating several different wire gauges, in addition to coax. The user therefore has the option to specify a variety of terminal sizes to exactly meet his requirements using standard terminals in standard front shell assemblies.

Example: An application required 2#14AWG, 2#22AWG and 1 coax RF signal circuit can be satisfied by selecting 17201MO3, five circuit plug assembly, with #20AWG and coax terminals purchased separately.

Refer to Page 3P Insert Configuration. Guide for wire range of selected front shell assembly.

Subminiature coax terminals are stamped from brass alloy, gold plated and use polypropylene insulators. They are provided as a pre-assembled unit and feature a one crimp termination of the inner conductor, outer braid and cable support using a special crimp tool which facilitates fast and easy termination.

All other terminals are screw machined high performance brass alloys. Standard finishes (shown in the chart) yield high corrosion resistance, long term solderability and low millivolt drop. All terminals are lubricated for increased mating life and protection from fret corrosion.



Subminiature Coax Terminal Descriptions

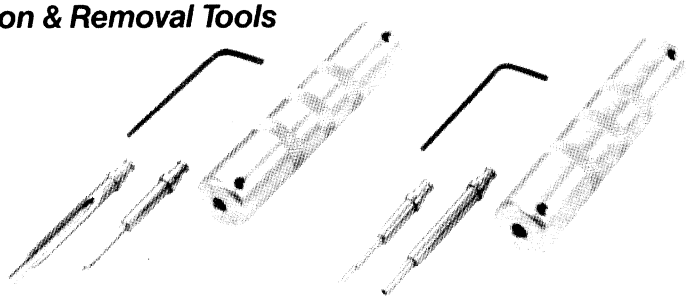
CABLE TYPE RG/U	QUANTITY	OUTER PIN	OUTER SOCKET	IMPEDANCE (OHMS)	INNER WIRE GAGE (AWG)	CRIMP TOOL	D
178,196	5 10 100	90030MG0 90030MG1 90030MG2	90031MG0 90031MG1 90031MG2	50		81030M01	.090
174,188,316	5 10 100	90032MG0 90032MG1 90032MG2	90033MG0 90033MG1 90033MG2	50		81031M01	.090
179,187	5 10 100	90032MG0 90032MG1 90032MG2	90033MG0 90033MG1 90033MG2	75		81032M01	.090

Terminal packs include ferules to capture wire braid. Refer to crimp tool section for tool specification. All coax terminals use the #16 insertion tool kit. (Catalog number 81003M01).
Standard Finish: Terminals: Gold
Ferules: Tin

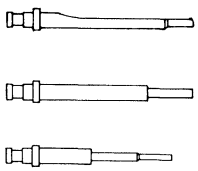
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Tool Selection Guide

Insertion & Removal Tools

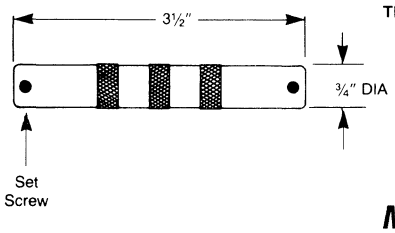


Insertion and Removal Kits



TERMINAL SIZES	COLOR CODE	KITS		TIPS ONLY			
		INSERTION	REMOVAL	INSERTION TIPS		REMOVAL TIPS	
				PIERCING	INSERTION	PIN	SOCKET
#8	RED	81043M01	81044M01	81144M01	81143M01	81145M01	81144M01
#10, #12	YELLOW	81014M01	81008M01	81117M01	81114M01	81112M01	81108M01
#14, #16	BLUE	81003M01	81001M01	81115M01	81103M01	81102M01	81101M01
#18, #20	RED	81020M01	81018M01	81142M01	81120M01	81119M01	81118M01
COAX	BLUE	81003M01	N/A	81115M01	81103M01	N/A	N/A

***Above kits include 1 handle and 1 each of two tips required.**
Terminal size is the maximum wire size the terminal will accommodate.
Insertion kits must be used in assembling the frontshells.
Removal kits are recommended when large numbers of assemblies are involved.



These kits include all required insertion and removal tools required to work with terminal sizes shown.

Master Kits

TERMINAL SIZES	CATALOG NUMBER	INCLUDES
#20,18,16,14	81002M01	Two handles, and seven tips in tool caddy
#8,10,12	81017M01	Two handles, and seven tips in tool caddy

P

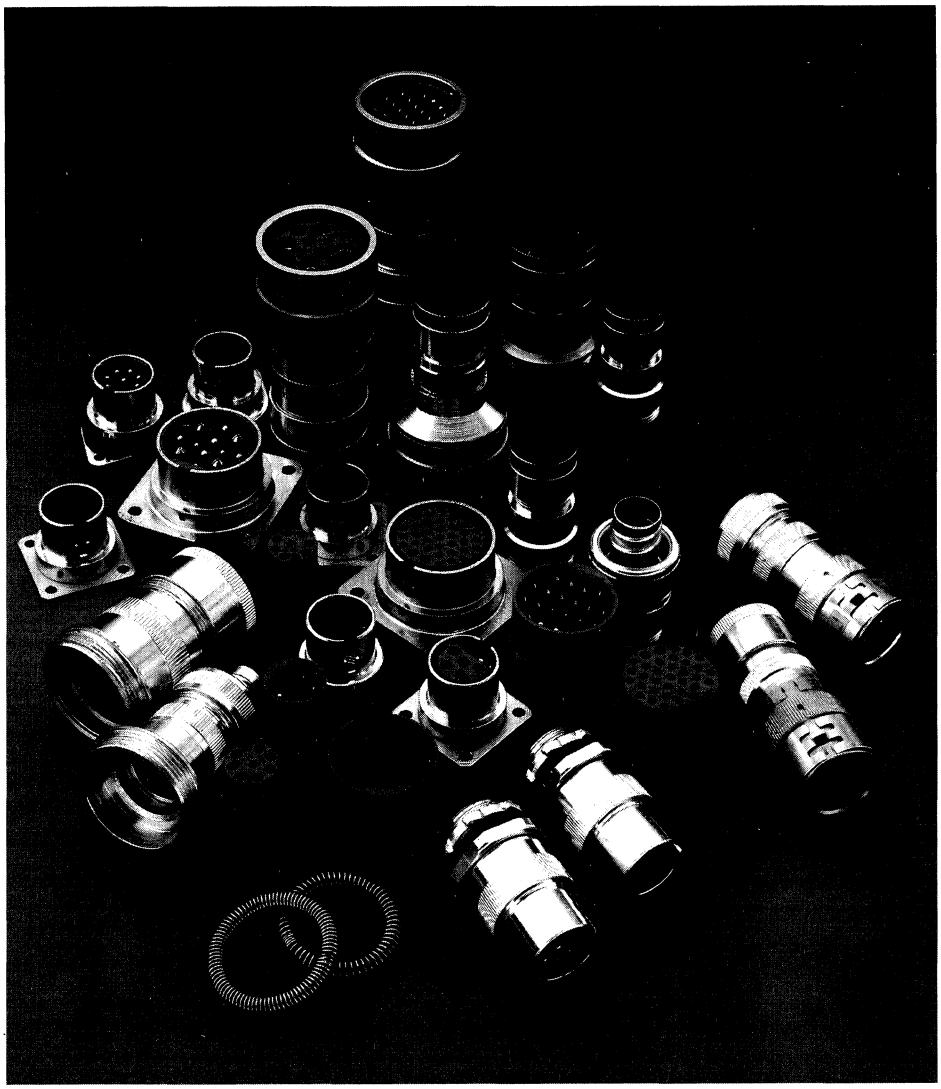
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Notes

Environmental Connectors

ADVANTAGE

The Affordable Alternative



The ADVANTAGE(TM) is a quick disconnect line of circular control and light power connectors designed for service in rugged environments. Its heavy-wall metal construction and bright chromate/zinc plating presents a formidable barrier to mechanical abuse and corrosion. The positive environmental seal in both the mated and unmated condition allows trouble free use in most environments.

The series, offered in three shell sizes, can accommodate applications involving 2 to 50 circuits with wire sizes ranging from #24 AWG to #8 AWG. Crimp screw machine terminals insure rapid and reliable installation. Shell sizes 51 & 53 feature a quick release spring lock permitting fast mating and unmating even in blind locations. A squeeze on the side of the connector prior to pulling is all that is required for release.

The ADVANTAGE(TM) fills the void that has existed in the industrial market between the low cost marginal performance connectors and the high performance industrial connectors such as the Industrial Interfaces' SPIRIT(TM) series. While mild environment applications are served adequately by the low cost MIL-C-5015 type connectors, the audio and DIN circulars, or the plastic/metal hybrids, many areas in the commercial/industrial market require more ruggedness, sealing and reliability. Until the ADVANTAGE(TM), no suitable alternative existed for those applications. Connector specifiers were forced to suffer with either lower performance (problematic) or over-specified (costly) connectors. The performance/cost balance of the ADVANTAGE(TM) now offers an affordable alternative for hard usage applications.

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ADVANTAGE *Modular Design For Maximum Flexibility*

The ADVANTAGE(TM) connector is packaged and sold in modules so that the user may select the exact components to suit his requirements.

To properly select those components, the following questions must be answered:

(1) What is the wire size to be connected?
(2) How many wires are there to connect?
(3) What is the voltage requirement?
(4) If a cable is involved, what is the cable diameter?
(5) If a conduit is involved, what type of conduit and trade size?
(6) For stationary receptacles, what mounting arrangement is required?
(7) Are any accessories or special application considerations involved?

With the above information it is possible to rapidly specify the ADVANTAGE(TM) connector configuration exactly suited to your needs.

There are a few things to keep in mind when specifying and ordering the modular components comprising the ADVANTAGE(TM) connector.

(1) The inserts are capable of accepting many different types and sizes of terminals. To give the user maximum flexibility, the terminals are ordered separately. See the information in the insert selection guide (page 21P) and the terminal selection guide (page 22P).

(2) Except for the Direct Flange Mount Front Shells, a backshell is required to complete a connector half.

(3) Angle stationary mounts may be obtainte by using the conduit hub backshell with the 90 degree adapter on page 28P. A 90 degree adapter is also available for plugs and appears on page 29P.

(4) On large orders, connectors can be provided pre-assembled to harnesses. Consult factory with your requirements.

(5) We are system problem solvers! If you do not see the solution to your problem in the catalog, give us a call. We would be delighted to work with you. Our products exist because of your needs.

(6) Unlike most connector vendors, we deliver PROMPTLY. Delivery is designed into our products and supported by an in-depth inventory stock policy monitored by MRP computer software. We do appreciate knowing your requirements early and will gladly deliver your shipment to your JIT delivery date.

CATALOG NUMBER SELECTION

(1) Having determined the insert and terminal requirements, the terminal part number for the various package sizes appears on page 22P.

(2) The insert selected defines the shell size required. Front shells and backshells must be the same shell size.

(3) Select the catalog number from the proper front shell page that describes the shell and insert type required.

(4) Select the catalog number from the proper backshell page that describes the size and type required.

(5) Repeat these steps for the other side of the connector.

(6) Select dust caps as required.

(7) Select the necessary insertion and removal tools from page 31P and the proper crimp tools and locators on page 30P.

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ADVANTAGE *The Affordable Alternative*

Connector Specifications

1.0 AGENCY APPROVALS

1.1 NATIONAL ELECTRIC CODE: Connectors conform to the NEC if applied within the constraints of the code.

1.2 UNDERWRITERS LABORATORIES: **ADVANTAGE** series connectors are recognized under the Underwriters Laboratories Component Recognition Program. File: E81982(N)

1.3 CANADIAN STANDARDS ASSOC. **ADVANTAGE** series meets the design requirements of CSA.

1.4 OTHER:
ADVANTAGE conforms to the JIC and Machine Tool Standard NFPA79.
ADVANTAGE meets NEMA 4 enclosure requirements.
ADVANTAGE 600V inserts meet the spacing requirements of VDE. (3mm through air, 4mm over surface)

2.0 MECHANICAL

2.1 CORD STRAIN RELIEF: 35 pound minimum throughout range per UL 514. Values exceed 100 pounds on most applications.

2.2 LIQUID-TIGHT CONDUIT STRAIN RELIEF: 150 pound minimum per UL 514 on type "M" conduit.

2.3 TERMINAL CRIMP STRENGTHS: Values exceed UL 486 for all wire gages specified.

2.4 MATING CYCLES: 200 mate/unmate cycles without excessive wear.

2.5 SHOCK: 50 G Minimum, all planes.

2.6 VIBRATION: Complies with MIL STD 202F, Test Method 204, Test Condition B.

3.0 ELECTRICAL

3.1 RATINGS:

1) **Voltage** rating of each insert is stated as AC/DC values.

2) **Current** ratings are determined by the bulk temperature rise, including ambient, not exceeding the insert temperature rating, which is 90°C. In general, the connectors are capable of carrying the currents of the SO Cable they are designed to accommodate. The NEC Tables on Current Ratings of Wires in Conduit also may be used as reference to allowable currents.

CURRENT RATINGS MINIMUM (AMPS) — ALL CIRCUITS

CIRCUITS	TERMINAL SIZE						
	#8	#10	#12	#14	#16	#18	#20
2	40	30	25	18	13	10	7
3	40	25	20	15	10	7	5
4-6	35	20	16	12	8	6	4
7-24	—	17.5	14	10.5	7	5	3.5
25-42	—	15	12	9	6	4	3
43+	—	12.5	10	7.5	5	3.5	2.5

In specific applications larger currents may be adequately handled by a few circuits without difficulty.

TERMINAL	MAX CURRENT (AMPS)
# 8	50
#10 or #12	35
#14 or #16	15
#18 or #20	10

Consult the factory for advice if the application is questionable. The bulk temperature should not exceed 90°C including ambient when max. current is applied.

3) All ratings apply to applications where the connector is not disengaged under load. Consult the factory for advice if the application requires disconnecting under load.

3.2 DIELECTRIC WITHSTAND: Conforms to UL 498. Tested at 1000 volts plus twice rated voltage for 1 minute between terminals and terminals to the shell.

3.3 INSULATION RESISTANCE: 5000 megohms typical at 25°C, 40-60% R.H.

3.4 MILLIVOLT DROP: Voltage probes located ¼" away from crimp barrel.

TERMINALS	WIRE	CURRENT	MV DROP
#16 Tin	#16AWG	1 AMP	1.5mv.
#16 Tin	#16	10	17
#20 Gold	#20	1	3.1
#20 Gold	#20	5	16

4.0 ENVIRONMENTAL:

4.1 TEMPERATURE: −40°C to +90° (−40°F to +194°)

4.2 HUMIDITY: 100 megohms min. insulation resistance after 96 hours of 95-100% R.H. at 100°C (MIL STD 202F Test Method 103B Condition B)

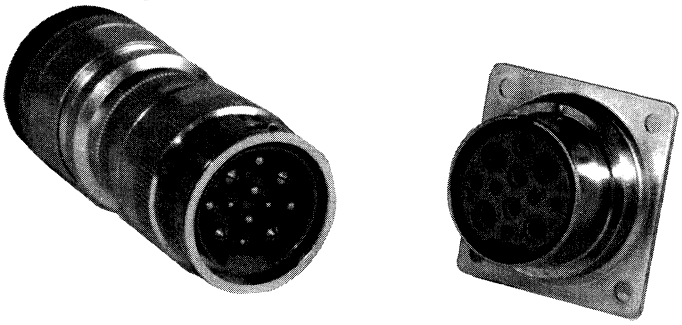
4.3 MOISTURE SEALS: No water enters electrical chamber when subjected to water jet spray per UL514. Applies to mated or unmated connectors without dust caps. Dust caps afford additional seal protection as well as preventing entry of mud, chips and other debris.

4.4 CORROSION: No exposure of base metal evident after 48 hours in salt spray per MIL-STD 202 Method 101.

4.5 CHEMICAL RESISTANCE: Inserts impervious to most oils, alcohols, fuels, glycols, salts, soaps and mild alkalis. Consult factory for specific applications.

Patents pending.

ADVANTAGE HARDWARE



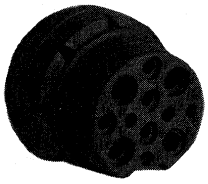
ADVANTAGE HARDWARE — FLEXIBILITY — FAST ASSEMBLY

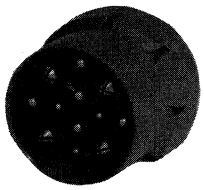
More Benefits accrue with the shell designs:

- Brass and aluminum machined parts offer a balanced package of precision, strength and economy.
- Heavy walls resist bending and impact.
- Heavy zinc plating with a chromate finish provides industrial grade corrosion protection.
- Modularity of shells allows a large number of applications to be satisfied with the same basic parts. Interfacing with cable, liquid tight conduit, rigid conduit hubs, panels or knockouts is a simple backshell choice.
- Cable backshells achieve extraordinary sealing and strain relief. ADVANTAGE backshells posseses the same independent action of expandable elastomers and strain relief spring pressure loading as required by the United States Air Force for military connectors on ground support equipment.
- The coupling lock is a unique spring mechanism which automatically and positively locks the two connector halves together when mated. Unmating is accomplished by a simple squeeze and pull motion.

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Insert - Selection Guide

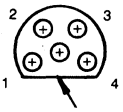




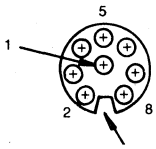
CODE
- O #18 MAX
- ⊕ #14 MAX (Fiber Optics & Coax)
- ⊙ #10 MAX
- ◎ # 8 MAX

Socket Front shown

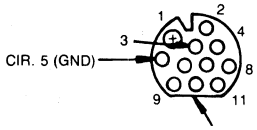
ADVANTAGE 51



"A" Key
5 Circuit - 600 V
#14 to #20 AWG
COAX or FIBER OPTIC

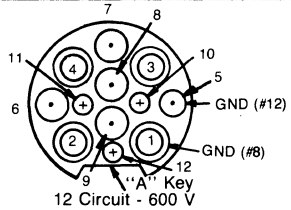


"A" Key
8 Circuit - 250 V
#14 to #20 AWG
COAX or FIBER OPTIC

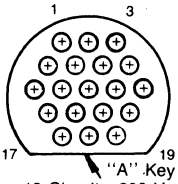


"A" Key
11 Circuit - 250 V
10#18 to #24 AWG
1#14 to #20 AWG
COAX or FIBER OPTIC

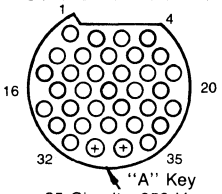
ADVANTAGE 53



12 Circuit - 600 V
4#8 to #10 AWG 5#10 to #16 AWG
3#14 to #20 AWG
COAX or FIBER OPTIC

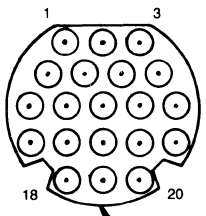


19 Circuit - 600 V
#14 to #20 AWG
COAX or FIBER OPTIC

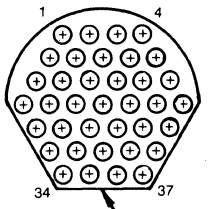


35 Circuit - 250 V
33#18 to #24 AWG 2#14 to #20 AWG
COAX or FIBER OPTIC

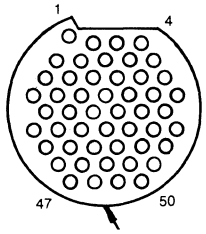
ADVANTAGE 54



"A" Key
20 Circuit - 600 V
#10 to #16 AWG

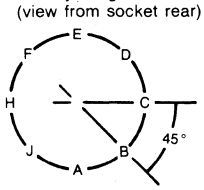


"A" Key
37 Circuit - 600 V
#14 to #20 AWG
COAX or FIBER OPTIC



"A" Key
50 Circuit - 250 V
#18 to #24 AWG

Key Progression
(view from socket rear)



INSERTS — FLEXIBILITY — SIMPLICITY

The design and material of the inserts offer the user distinctive benefits.

- The UL recognized thermoplastic elastomer combines the low durometer sealing characteristics of rubber with the long term aging properties of plastic. The result is a simplified design which is easy to use and understand.
- The multipurpose insert material supports the terminals, provides all seals and will not crack or chip as frequently occurs with rigid plastic.
- The inserts are reversible between shells, making reverse service an assembly procedure using the same parts.
- Since the inserts may be assembled into the shells in eight (8) different clocking positions, applications requiring several identifying key distinctions are satisfied with the same parts—assembled differently.
- The inserts are capable of accepting several different terminal sizes and finishes — in the same circuit position! This industry first gives the user the flexibility to exactly meet his requirements — with a few standard parts.
- Each circuit position in the insert has a closed diaphragm which is not broken until preparation for terminal insertion. Thus, circuit positions not required immediately remain sealed and ready for use at a later date. No dummy terminals are required.
- Unlike conventional designs the pin insert possesses a shroud which surrounds the socket insert when mated. The double shrouding by both the inserts and the shells provide increased sealing and pin terminal protection.
- Equipment grounding is achieved through a raised terminal in the socket insert. A make first and break last condition, insuring a safe ground before engaging or disengaging live circuits, is forever present without the use of longer ground pins.

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ADVANTAGE Terminal Selection Guide

ADVANTAGE(TM) Front Shells do not come with terminals. The user may customize the terminal selection from a variety of sizes, types and finishes to exactly meet his requirements.

To order terminals follow these steps:

(1) Select the insert that satisfy your requirement from page 3.

(2) Choose the largest terminal size with the required plating that will accept your wire size and fit the insert you selected.

(3) Multiply the number of terminals per connector times the number of connectors.

(4) Order the package sizes and quantities from the terminal chart to meet your requirement plus provide some spares.

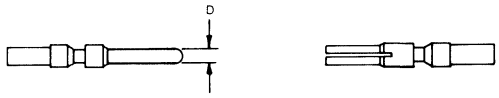
If you are going to mix terminal sizes in the same insert, remember that only terminal sizes with the same pin diameter will mate together. Also note very carefully the allowed terminal types and sizes for each of the cores in the insert you selected. A core for a #12 terminal, for instance will not accept a #16 terminal. The pages on front shell selection clearly state the allowed terminals for each insert configuration.

It is not necessary to purchase a terminal for every circuit position in the insert, only the ones to be used. Spare positions do not need a dummy terminal to remain sealed by the insert core diaphragm.

Subminiature coax terminals are gold plated stamped brass and use polypropylene spacers. They are provided as a pre-assembled unit and feature a one operation multi-crimp termination of the inner conductor, outer braid and cable support using a special crimp tool.

All other terminals are screw machined from high performance brass alloys. All terminals are lubricated for increased mating life and protection from fret corrosion.

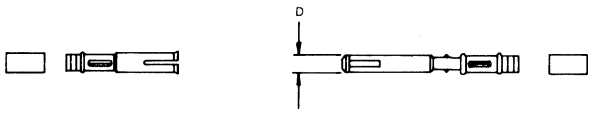
Screw machined terminals may be crimped or soldered. Only crimp tools specified should be used. An insertion tool is required for proper assembly of terminals. Refer to hand tool section for crimp and hand tool specifications.



SCREW MACHINED TERMINAL DESCRIPTION

TERMINAL SIZE	CRIMP RANGE (AWG)	QUANTITY	PIN TERMINAL TIN	PIN TERMINAL GOLD	SOCKET TERMINAL TIN	SOCKET TERMINAL GOLD	DIMENSION D DIAMETER
#8	8-10	5 10 100 1000	90010M00 90010M01 90010M02 90010B01		90011M00 90011M01 90011M02 90011B01		4.5mm (.178 in.)
#10	10-14	5 10 100 1000	90014M00 90014M01 90014M02 90014B01		90015M00 90015M01 90015M02 90015B01		3.0mm (.118 in.)
#12	12-16	5 10 100 1000	90004M00 90004M01 90004M02 90004B01		90005M00 90005M01 90005M02 90004B01		3.0mm (.118 in.)
#14	14-18	5 10 100 1000	90008M00 90008M01 90008M02 90008B01		90009M00 90009M01 90009M02 90009B01		2.0mm (.078 in.)
#16	16-20	5 10 100 1000	90006M00 90006M01 90006M02 90006B01	90006MG0 90006MG1 90006MG2 90006BG1	90007M00 90007M01 90007M02 90007B01	90007MG0 90007MG1 90007MG2 90007BG1	2.0mm (.078 in.)
#18	18-22	5 10 100 1000	90016M00 90016M01 90016M02 90016B01	90016MG0 90016MG1 90016MG2 90016BG1	90017M00 90017M01 90017M02 90017B01	90017MG0 90017MG1 90017MG2 90017BG1	1.5mm (.060 in.)
#20	20-22	5 10 100 1000		90012MG0 90012MG1 90012MG2 90012BG1		90013MG0 90013MG1 90013MG2 90013BG1	1.5mm (.060 in.)

Terminals are screw machined from high performance brass alloys.
Terminals are lubricated for increased mating life and protection from fret corrosion.
Pins and sockets of different sizes with the same D diameter will mate in the same connector.
Shaded blocks are standards which are in stock at all times.



SUBMINIATURE COAX TERMINAL DESCRIPTIONS

CABLE TYPE RG/U	QUANTITY	OUTER PIN	OUTER SOCKET	IMPEDENCE	INNER WIRE GAUGE	CRIMP TOOL	D
178,196	5 10 100	90030MG0 90030MG1 90030MG2	90031MG0 90031MG1 90031MG2	50 OHM	30AWG	81030M01	.090 in.
174,188,316	5 10 100	90032MG0 90032MG1 90032MG2	90033MG0 90033MG1 90033MG2	50 OHM	26AWG	81031M01	.090 in.
179,187	5 10 100	90032MG0 90032MG1 90032MG2	90033MG0 90033MG1 90033MG2	75 OHM	30AWG	81032M01	.090 in.

Terminal packs include ferrules to capture wire braid. Refer to crimp tool section for tool specification. All coax and fiber optic terminals use the #14 or #16 insertion tool kit. (Catalog number 81003M01).
Standard finish: Terminals: Gold
Ferrules: Tin

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ADVANTAGE *The Affordable Alternative*

INTERFACES

Cable

Round Cable within diameter range of .225 to 1.150 inches.

Liquid-Tight Conduit

All common metallic and non-metallic flexible conduit.

Female Pipe Thread

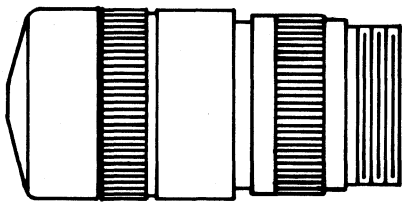
Box Hubs
Rigid Conduit
Threaded Devices
(Pendants, etc.)
Knockout Holes
(Locknut Provided)
Right Angle Hub Adapter

Flange Panel Knockouts

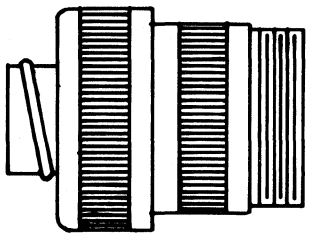
Compatible with MIL SPEC cutout dimensions.

BACKSHELLS

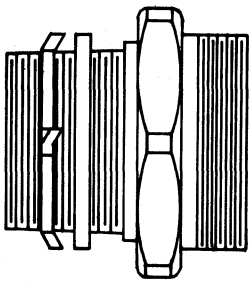
Cable Backshells

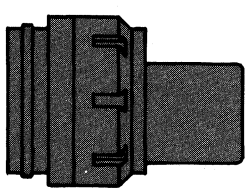


Liquid-Tight Conduit Backshell



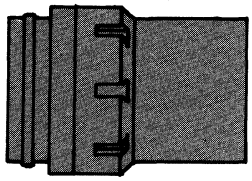
Conduit Hub Adapter Backshells

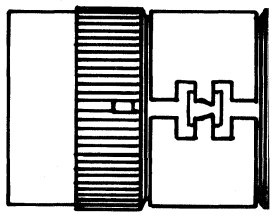




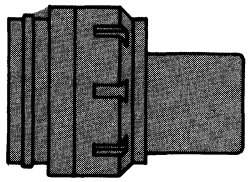
FRONT SHELLS

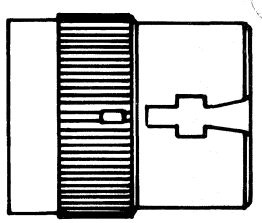
Plug Assemblies



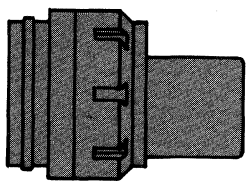


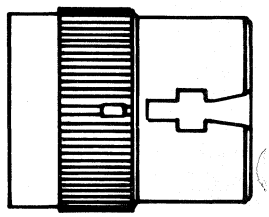
In Line Receptacle Assemblies



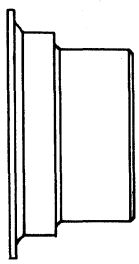


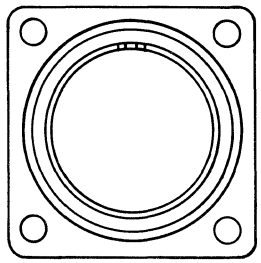
Mounted Receptacle Assemblies





Direct Mount Flange Assemblies





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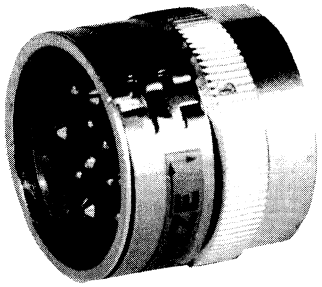
ADVANTAGE

Frontshells 51 & 53

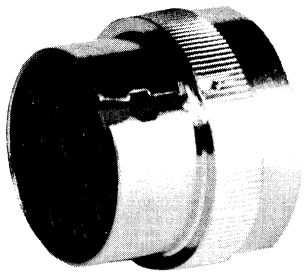
FEATURES

- ADVANTAGE 51 and 53 feature a spring release coupling system on the portable plug. A squeeze and pull motion quickly disengages the connector.
- The positive lock prevents accidental unmating and resists vibration.
- Shells are blind mating and do not require visual orientation.
Shell and insert keying prevent terminals from mating unless properly aligned.
- A shroud is formed by the insert as well as the shell. Double shrouding enhances the seal and affords mechanical protection of the pins.

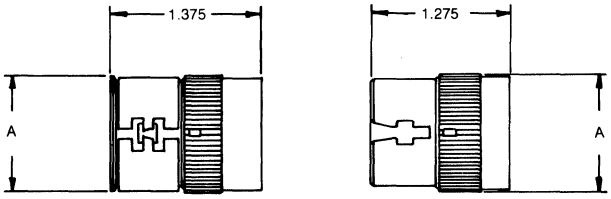
PORTABLE PLUG ASSEMBLY



IN LINE RECEPTACLE ASSEMBLY



Both require a backshell to complete connector half



CHARTED DIMENSIONS

SHELL SIZE	A	B	C	D	E
51	1.06	.150	.969	1.28	.042
53	1.65	.177	1.562	2.00	.049

Materials/Construction

1. All assemblies come with shells and inserts. Terminals must be purchased separately.

2. Shells are screw machined brass. Flanges are steel. All shell hardware is zinc plated with a clear chromate finish.
Consult factory for other finishes available by special order.

3. The release spring is made from spring stock stainless steel for long life and positive action.

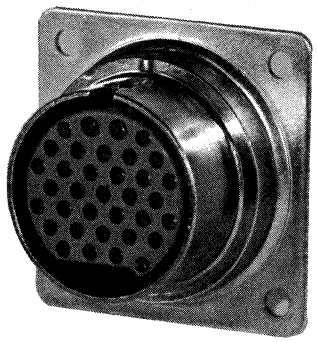
4. Inserts are a thermoplastic elastomer and will not crack or chip.

					PORTABLE PLUGS		IN LINE RECEPTACLES	
MAXIMUM NO. OF CIRCUITS	AWG WIRE RANGE	SHELL SIZE	ACCEPTS TERMINAL SIZES	VOLTAGE RATING	STANDARD SERVICE WITH PIN INSERT	REVERSE SERVICE WITH SOCKET INSERT	STANDARD SERVICE WITH SOCKET INSERT	REVERSE SERVICE WITH PIN INSERT
5	14-20	51	14, 16	600	51901M04	51903M04	51904M04	51902M04
8	14-20	51	14, 16	250	51905M04	51907M04	51908M04	51906M04
11 (10)	18-24	51	18, 20	250	51909M04	51911M04	51912M04	51910M04
(1)	14-20		14, 16					
(4)	8-10		8					
12 (5)	10-16	53	10, 12	600	53951M04	53953M04	53954M04	53952M04
(3)	14-20		14, 16					
19	14-20	53	14, 16	600	53901M04	53903M04	53904M04	53902M04
35 (33)	18-20	53	18, 20	250	53909M04	53911M04	53912M04	53910M04
(2)	14-20		14, 16					

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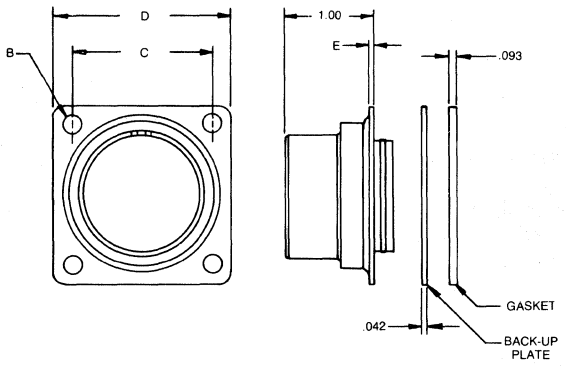
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ADVANTAGE



DIRECT MOUNT RECEPTACLE ASSEMBLY 4 HOLE

- NO BACKSHELL REQUIRED
- MOUNTS FROM FRONT OR REAR OF PANEL



PANEL MOUNTING HOLE DIMENSIONS- 4 HOLE

SHELL SIZE	MS SIZE	*CENTER HOLE (DIA)	SCREW HOLE (4)	SCREW SIZE
51	16	1.030/1.080	.150	#6
53	28	1.780/1.780	.177	#8

*1st DIMENSION IS MIL SPEC DIM. FOR FRONT MOUNT
2nd DIMENSION ALLOWS MOUNTING FROM REAR

DIRECT MOUNT RECEPTACLES (4 HOLE)		DIRECT MOUNT RECEPTACLES (2HOLE)	
STANDARD SERVICE WITH SOCKET INSERT	REVERSE SERVICE WITH PIN INSERT	STANDARD SERVICE WITH SOCKET INSERT	REVERSE SERVICE WITH PIN INSERT
51904M34	51902M34	51904M24	51902M24
51908M34	51906M34	51908M24	51906M24
51912M34	51910M34	51912M24	51910M24
53954M34	53952M34	NA	NA
53904M34	53902M34	NA	NA
53912M34	53910M34	NA	NA

APPLICATION NOTES:

1. Portable plugs and in-line receptacles require a backshell to complete the connector half.
2. Portable plugs and in-line receptables are assembled to a backshell by hand turning the joining threads until fully seated.
3. Direct mount assemblies do not require a backshell and fasten directly to a panel. A gasket is included.
4. The four hole direct mounts come with a backup plate to allow mounting to either the front or back side of a panel.
5. An insertion hand tool is necessary to prepare the insert and to load the terminals. Refer to page on handtools for details.
6. Terminals may be soldered or crimped to the wires.
7. Many options exist as to what terminal sizes, types and finishes may be used. Refer to terminal specification page for details.
8. Sub miniature coax terminals are available. They are accepted by any terminal core that accepts a #14 terminal.
9. In general, socket terminals should be specified for the electrically alive or source side of the connector.
10. Ratings are based on not breaking under load. Consult factory for other requirements.

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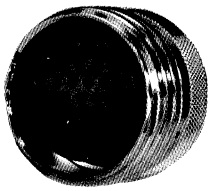
ADVANTAGE *Frontshells 54*

PORTABLE PLUG ASSEMBLY



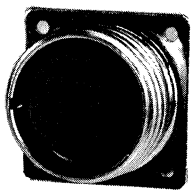
REQUIRES A BACKSHELL TO COMPLETE CONNECTOR HALF

IN-LINE RECEPTACLE ASSEMBLY

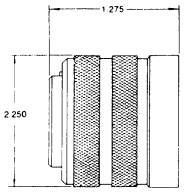


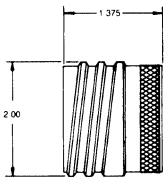
REQUIRES A BACKSHELL TO COMPLETE CONNECTOR HALF

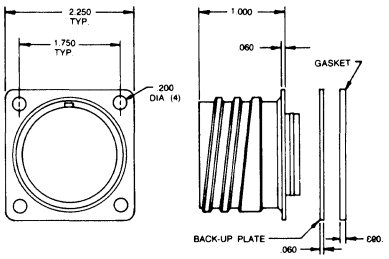
DIRECT MOUNT RECEPTACLE ASSEMBLY



FOR DIRECT MOUNT TO PANEL NO BACKSHELL REQUIRED







ADVANTAGE(TM) 54 FRONT SHELL ASSEMBLIES

Mating on the ADVANTAGE(TM) 54 is accomplished by an Acme coupling ring on the portable plug. The mechanical advantage afforded by the course Acme allows easy and rapid mating of large circuit sizes. Less than 2½ turns are required for engagement.

SHELL SIZE	MS SIZE	CENTER HOLE (DIA)	SCREW HOLE (4)	SCREW SIZE
54	32	2.030	.177	#8

MAY BE MOUNTED FROM FRONT OR REAR OF PANEL

					PORTABLE PLUGS		IN LINE RECEPTACLES		DIRECT MOUNT RECEPTACLES (4 HOLE)	
MAXIMUM NO. OF CIRCUITS	AWG WIRE RANGE	SHELL SIZE	ACCEPTS TERMINAL SIZES	VOLTAGE RATING	STANDARD SERVICE WITH PIN INSERT	REVERSE SERVICE WITH SOCKET INSERT	STANDARD SERVICE WITH SOCKET INSERT	REVERSE SERVICE WITH PIN INSERT	STANDARD SERVICE WITH SOCKET INSERT	REVERSE SERVICE WITH PIN INSERT
20	10-16	54	10,12	600	54905M04	54907M04	54908M04	54906M04	54908M34	54906M34
37	14-24	54	14,16,18,20	600	54901M04	54903M04	54904M04	54902M04	54904M34	54902M34
50	18-24	54	18,20	250	54909M04	54911M04	54912M04	54910M04	54912M34	54910M34

MATERIALS/CONSTRUCTION:

1. All assemblies come with shells and inserts. Terminals must be purchased separately.
2. Shells are machined aluminum. Flanges are steel. All shell hardware is bright clear anodized. Consult factory for other finishes.
3. Inserts are a thermoplastic elastomer and will not crack or chip.

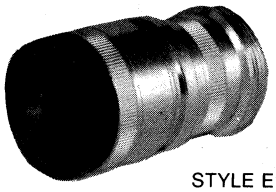
APPLICATION NOTES:

1. Portable plugs and in-line receptacles require a backshell to complete the connector half.
2. Portable plugs and in-line receptacles are assembled to a backshell by hand turning the joining threads until fully seated.
3. Direct mount assemblies do not require a backshell and fasten directly to a panel. A gasket is included.
4. The four hole direct mounts come with a backup plate to allow mounting to either the front or back side of a panel.
5. An insertion hand tool is necessary to prepare the insert and to load the terminals. Refer to page on hand tools for details.
6. Terminals may be soldered or crimped to the wires.
7. Many options exist as to what terminal sizes, types and finishes may be used. Refer to terminal specification page for details.
8. Subminiature coax terminals as well as terminals for fiber optic cable are available. They are accepted by any terminal core that accepts a #14 or #16 terminal.
9. In general, socket terminals should be specified for the electrically alive or source side of the connector.
10. Ratings are based on not breaking under load. Consult factory for other requirements.

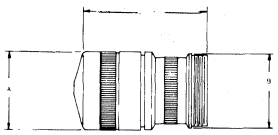
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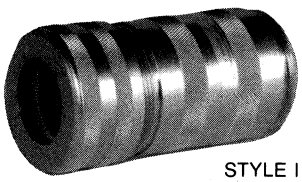
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ADVANTAGE *Backshells 51, 53 and 54*

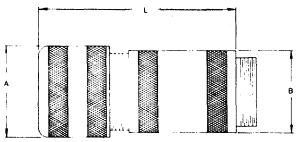


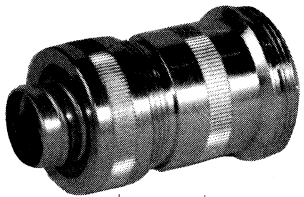
STYLE E





STYLE I





Liquid-tight conduit backshell assemblies will accept direct attachment of various sizes of liquid-tight conduit. Backshells are dimensioned to standard conduit sizes which ELIMINATES TRANSITION ADAPTERS from connector shell to conduit.

Backshells are available for several metallic and non-metallic liquid tight conduits. Choose the backshell style you require by referring to conduit composition chart. Then determine the backshell required in the catalog number chart for the style and trade size you require.

CABLE BACKSHELLS

SHELL SIZE	CABLE RANGE (DIA) INCHES	STYLE	SHELL MATERIAL	CATALOG NUMBER	DIMENSIONS (INCHES) A	B	L
51	(.300-.500)	E	BRASS	51003M04	1.15	1.01	1.70
51	(.225-.350)	E	BRASS	51004M04	.90	1.01	1.97
51	(.500-.650)	E	BRASS	51005M04	1.15	1.01	1.70
53	(.500-.750)	E	BRASS	53003M04	1.39	1.57	2.40
53	(.300-.500)	E	BRASS	53004M04	1.15	1.57	2.20
53	(.700-.950)	E	BRASS	53005M04	1.63	1.57	2.37
54	(.700-.950	E	BRASS	54003M04	1.63	1.57	2.37
54	(.500-.750)	E	BRASS	54004M04	1.39	1.57	2.40
54	(.900-1.15)	I	ALUM	54005M04	1.96	1.88	3.50

Cable backshells achieve extraordinary sealing and strain relief through the independent action of expandable elastomers and spring pressure loading. The stainless steel strain relief spring closes around the cable as the compression nut is threaded downward. High but controlled pressure is applied to the cable yielding superior holding power without damage to the cable. Pulling the cable increases the spring force on the cable further enhancing the holding power when needed.

Sealing is accomplished by an expandable elastomer diaphragm which conforms to the cable diameter when inserted into the shell. Wide-range cable diameter performance is possible without an assortment of sealing grommets typical in conventional designs.

Shells made from brass are zinc plated with a clear chromate finish. Shells made from aluminum are bright clear anodized.

LIQUID TIGHT CONDUIT BACKSHELLS

SHELL SIZE	TRADE SIZE	STYLE	SHELL MATERIAL	CATALOG NUMBER	DIMENSIONS (INCHES) A	B	L
51	3/8	M	BRASS	51006M04	1.18	1.00	1.12
51	3/8	T	BRASS	51006M14	1.18	1.00	1.12
51	3/8	R	BRASS	51006M24	1.18	1.00	1.12
51	1/2	M	BRASS	51011M04	1.18	1.00	1.12
51	1/2	T	BRASS	51011M14	1.18	1.00	1.12
51	1/2	R	BRASS	51011M24	1.18	1.00	1.12
53	1/2	M	BRASS	53063M04	1.47	1.57	1.95
53	1/2	T	BRASS	53063M14	1.47	1.57	1.95
53	1/2	R	BRASS	53063M24	1.47	1.57	1.95
53	3/4	M	BRASS	53006M04	1.47	1.57	1.95
53	3/4	T	BRASS	53006M14	1.47	1.57	1.95
53	3/4	R	BRASS	53006M24	1.47	1.57	1.95
54	3/4	M	BRASS	54006M04	1.47	1.88	2.05
54	3/4	T	BRASS	54006M14	1.47	1.88	2.05
54	3/4	R	BRASS	54006M24	1.47	1.88	2.05
54	1	M	CONSULT FACTORY	54011M04	CONSULT FACTORY		
54	1	T		54011M14			
54	1	R		54011M24			

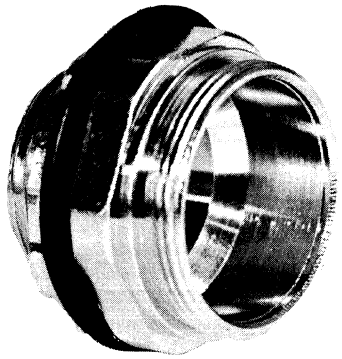
CONDUIT COMPOSITION	DESCRIPTION	BACKSHELL STYLE	CONDUIT TYPES
Metallic	Plastic Over Metal	M	ALT,AT,CSA,EF,EFL,HC,HEX,LA LOR,LT,OR,UXTL,UA,ZHN
Non-Metallic	Heavy Wall Plastic	M	Polytuff I, Xtra Flex Type 2
Non-Metallic	Nylon Reinforced Rubber	R	CN-P, LMN-P
Non-Metallic	Thin Corrugated Plastic	T	Polytuff II, Xtra Flex Type 1

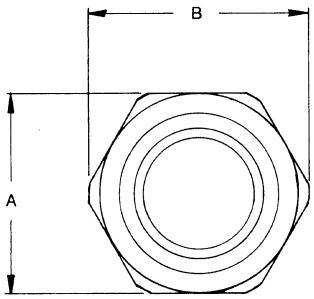
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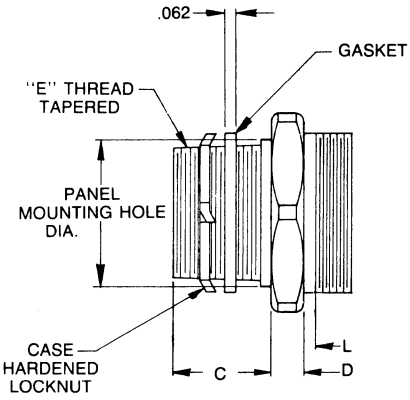
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ADVANTAGE *Backshells 51, 53 and 54*

CONDUIT HUB BACKSHELLS







Conduit Hub Adapters allow for a variety of connector mounting methods. The freedom to select wireway or panel mount through use of a knockout punch; hub or pendant mount; 90° or 45° angle conduit coupling attachment are but a few of the possibilities.

Shells made from aluminum are bright clear anodized.

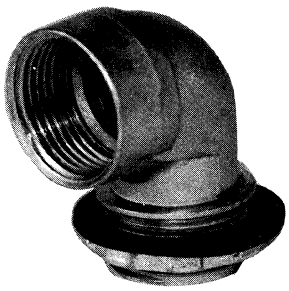
Shells made from brass are zinc plated with a clear chromate finish.

MAXIMUM PANEL THICKNESS IS 1/8 IN.

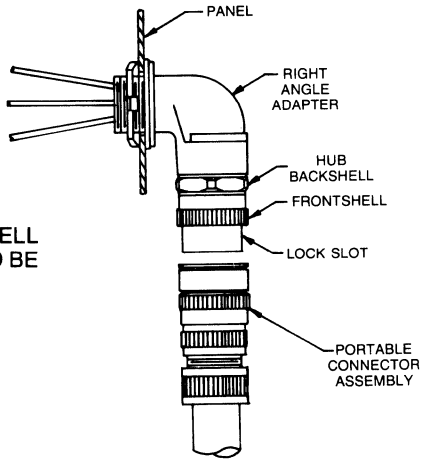
SHELL SIZE	TRADE SIZE	SHELL MATERIAL	CATALOG NUMBER	DIMENSIONS (INCHES)						PANEL MOUNTING HOLE (DIA)
				A	B	C	D	L	E THREAD	
51	1/2	BRASS	51018M04	1 1/4	1 1/8	.56	.17	.17	1/2-14NPT	.875
53	1	BRASS	53019M04	1 3/4	1 5/8	.65	.28	.38	1-11 1/2NPT	1.375
54	1	ALUM	54018M04	2 11/64	2	.65	.40	.50	1-11 1/2NPT	1.375

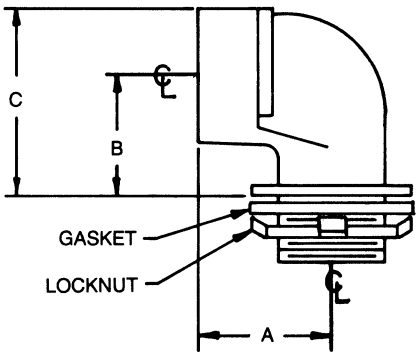
INCLUDES GASKET AND LOCKNUT

RIGHT ANGLE ADAPTERS FOR CONDUIT HUB BACKSHELLS



ADAPTERS ALLOW THE HUB BACKSHELL AND ITS FRONT SHELL ASSEMBLY TO BE MOUNTED AT 90° TO THE PANEL.





MAXIMUM PANEL THICKNESS IS 1/8 IN.

TRADE SIZE	SHELL MATERIAL	CATALOG NUMBER	DIMENSIONS (INCHES)				PANEL MOUNTING HOLE
			A	B	C	E THREAD	
1/2	STEEL	51045M04	1.25	.66	1.20	1/2-14NPT	.875
1	STEEL	53045M04	1.32	1.17	1.90	1-11 1/2NPT	1.375

INCLUDES GASKET AND LOCKNUT. ZINC PLATE FINISH ON ALL METAL PARTS.

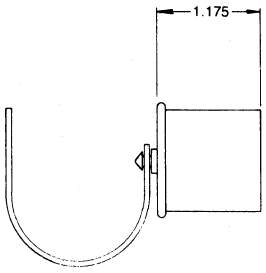
NOTE: WHEN TIGHTENING HUB BACKSHELL INTO ADAPTER, POSITION FRONT SHELL LOCK SLOT AWAY FROM PANEL TO FACILITATE EASY MATING.

P

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ADVANTAGE Accessories

DUST CAPS

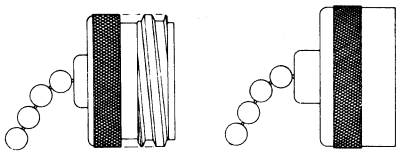


ADVANTAGE(TM) 51 & 53

Dust caps for ADVANTAGE(TM) 51 and 53 are molded of rubber and offer protection from dirt and grime entering the contact area when the connectors are unmated. A rubber strap secures the cap to the shell when not in use. The design is universal and slides onto either the plug or receptacle shell to provide splash proof protection. Securement is by the frictional fit onto the front shell.

Dust caps for ADVANTAGE(TM) 54 are anodized aluminum with rubber seals. A bead chain secures the cap to the backshell or panel. A unique cap is available for the plug or receptacle with threads that match the front shell.

FRONT SHELL SIZE	TYPE	CATALOG NUMBER
51	Plug or Recp	51043M04
53	Plug or Recp	53043M04
54	Plug	54043M04
54	Recp	54044M04

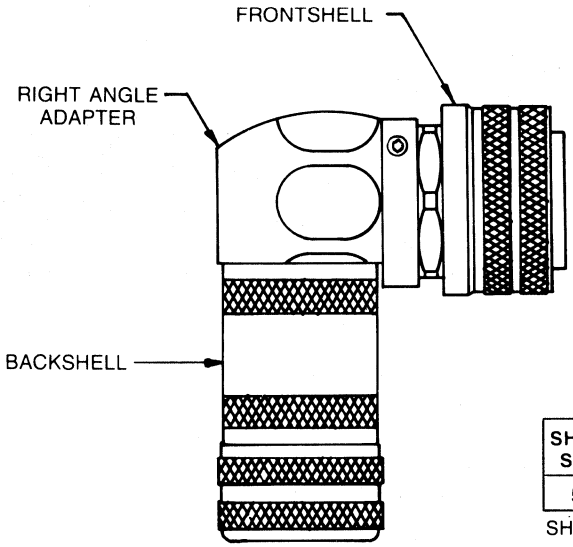


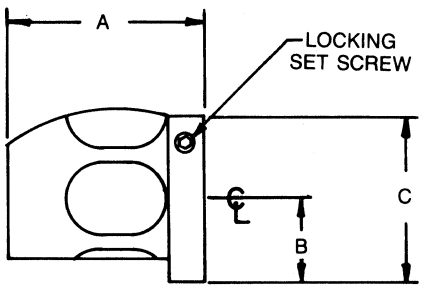
PLUG RECEPTACLE

ADVANTAGE(TM) 54

Assembles between the portable front shell and any backshell to allow a 90 degree take-off of the conduit or cable. Features a fully adjustable (360°) clocking angle.

RIGHT ANGLE ADAPTER FOR ADVANTAGE(TM) 54 PORTABLE FRONTSHELLS





SHELL SIZE	SHELL MATERIAL	CATALOG NUMBER	DIMENSIONS (INCHES) A	B	C
54	ALUM	54075M04	2.68	2.25	1.12

SHELLS MADE FROM ALUMINUM ARE BRIGHT ANODIZED.

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CRIMP TOOLS & LOCATORS



Advantage Screw Machine Terminals must be crimped with a military four star indent tool to insure proper reliability.

TERMINAL SIZES	DANIELS PN: AF8 MIL SPEC: M22520/1-01 COLOR CODE: BLUE	HAND CRIMP TOOLS M309 MODIFIED RED	PNEUMATIC CRIMP TOOLS WA27F M22520/29	PNEUMATIC CRIMP TOOLS WA27-309EP MODIFIED	LOCATOR CATALOG NUMBER
#8		81027M01		81041M01	81028M01
#10		81027M01		81041M01	81010M01
#12	81011M01	81027M01	81040M01	81041M01	81010M01
#14,#16	81011M01	81027M01	81040M01	81041M01	81009M01
#18,#20	81011M01	81027M01	81040M01	81041M01	81022M01

Above tools crimp all wire sizes accommodated by terminals listed.
Locators fit all crimp tools listed. Locators are required to properly position terminal.

PNEUMATIC CRIMP TOOL ACCESSORIES

Bench Mount	81038M01	(Daniels PN WA27BUV)
Foot Switch	81039M01	(Daniels PN WA10)

COAX TERMINAL CRIMP TOOLS

CABLE TYPE RG/U	CATALOG NUMBER	AMP PART NUMBER
178,196	81030M01	69656-2 MOD E
174,188,316	81031M01	69656 MOD E
179,187	81032M01	69656-1 MOD E

Locators are not required for COAX Crimp Tools.

The terminals are designed to crimp properly with standard commercially available crimp tools with full cycle action. The standard indent settings are used for the wire being crimped.

Locators must be used to position terminals at the right depth for proper crimping. The locators accommodate both pins and sockets.

Terminal locators are mounted on the tool in the same manner as Mil. Spec. locators, and include set screws.

Locators are available for the two most common crimp tools utilized in industry. Consult the factory if the crimp tool you plan to use is not shown.

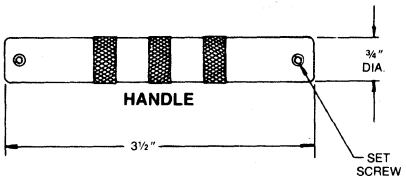
Crimp tools may be purchased from Industrial Interfaces, Inc.

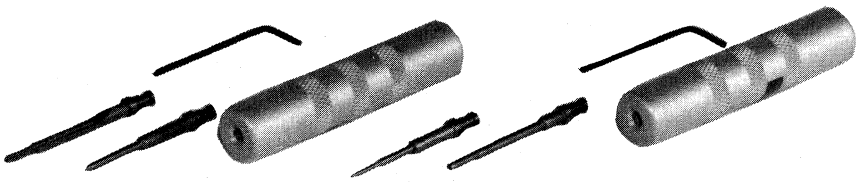
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Tool Selection Guide

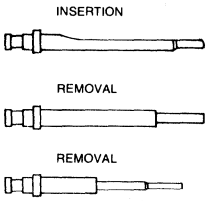
INSERTION & REMOVAL TOOLS





INSERTION AND REMOVAL KITS

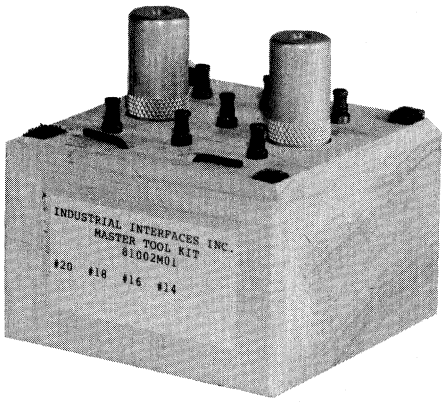
TIPS



Insertion kits must be used in assembling the frontshells.

TERMINAL SIZES	COLOR CODE	KITS		TIPS ONLY			
		INSERTION	REMOVAL	INSERTION TIPS		REMOVAL TIPS	
				PIERCING	INSERTION	PIN	SOCKET
#8	RED	81043M01	81044M01	81144M01	81143M01	81145M01	81144M01
#10,#12	YELLOW	81014M01	81008M01	81117M01	81114M01	81112M01	81108M01
#14,#16	BLUE	81003M01	81001M01	81115M01	81103M01	81102M01	81101M01
#18,#20	RED	81020M01	81018M01	81115M01	81120M01	81119M01	81118M01
COAX	BLUE	81003M01	N/A	81115M01	81103M01	N/A	N/A

*Above kits include 1 handle and 1 each of two tips required.
Terminal size is the maximum wire size the terminal will accommodate.
Removal kits are recommended when large numbers of assemblies are involved and rework is anticipated.



MASTER TOOL KIT

TERMINAL SIZES	CATALOG NUMBER	INCLUDES
#20,18,16,14	81002M01	Two handles, and seven tips in tool caddy
#8,10,12	81017M01	Two handles, and seven tips in tool caddy

These kits include all required insertion and removal tools required to work with terminal sizes shown.

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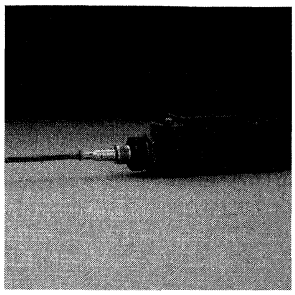
MICRO-C *Miniature Connectors for Rugged Environments*

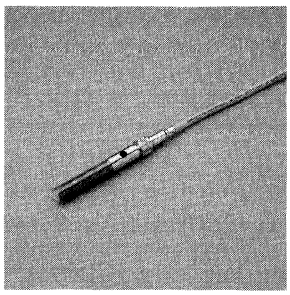


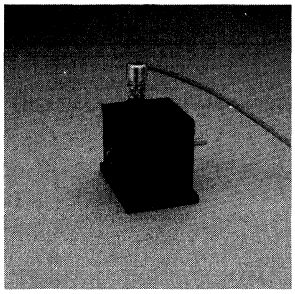
MICRO-C pre-wired miniature connectors are intended for signal circuits in sensing, monitoring, switching and control applications. They are suitable for applications in the industrial, medical and scientific markets where high reliability, ruggedness and environmental sealing are required.

MICRO-C connectors are intermateable with other miniature connectors that conform to U.S. and International configuration standards, but are uniquely constructed to offer increased benefits to the user. The all mechanical securement of the connector head eliminates the reliability and long delivery problems of molded-on connector heads found on competitive designs.

THE MICRO-C IS ENGINEERED FOR DELIVERY







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MICRO-C

DESIGN FEATURES

- High strength cable crimp survives 35-60 pounds pull out force. Eliminates failure problems found in "flexible" molded-on connector heads.
- Epoxy sealed receptacle shells for positive reliability
- 6P rating allows mated pair to be used under 6 feet of water
- All metal plug shell construction offers extreme ruggedness
- Ground circuit mates before other terminals
- Compatible with European DIN standard Prox switches
- Fast mount hex driven stationary receptacles — no special span wrench required.
- Terminals are supported by elastomer dielectric to resist deformation and shock

SEVERAL CONSTRUCTION VARIATIONS ARE OFFERED AS STANDARD OFF-THE-SHELF ASSEMBLIES:

- 3 and 4 circuit inserts
- US and International keying, both AC and DC
- #18 and #22 AWG cables
- Standard cable lengths of 3,6,9,12 and 20 feet
- Braided and non-braided cables
- Polyvinyl and Polyurethane jackets
- Straight and Right Angle Plugs
- 1/4" and 1/2" pipe mount receptacles
- In-line cable receptacles
- Teflon coated if required for weld applications

SPECIALS ARE EASY TOO — INCLUDING:

- Gold plated terminals
- Custom cable or cable lengths
- Custom color codes
- Double ended plug cables
- Customer components may be assembled to the harness

CHALLENGE OUR ENGINEERS WITH YOUR OEM APPLICATION!

MICRO-C *Connector Specifications*

1.0 RECOGNIZED AGENCY APPROVALS: MICRO-C SERIES connectors are recognized under the Underwriters Laboratories Component Recognition Program File E81982(N)

2.0 MECHANICAL SPECIFICATIONS:

2.1 Receptacle Body: UL recognized high impact glass filled polyester. Rated tensile strength of 30,000 PSI. Heat deflection temperature exceeds 220 degrees centigrade. Excellent chemical resistance to gasoline, motor oil, transmission fluid, hydrocarbons and organic solvents. Good resistance to ketones, esters and mild acids at lower temperature. Hardness is 100M.

2.2 Insert Material: UL recognized plastic elastomer. Excellent performance compared to thermoplastic/rubber blends. Exceptional chemical resistance, electrical support and seal capability.

2.3 Plug Shell and Coupling Nut: Brass alloy with zinc/chromate protective finish.

2.4 Terminals: Copper alloy, tin plated made from solid bar stock.

2.5 Receptacle Seal: Nitrite "O" ring.

2.6 Cable (Plug): Available in polyvinyl chloride (PVC) or polyurethane (PUR) jacket. Some cable types have overall braid for additional strength.

2.7 Leads (Receptacle): Stranded and tinned #22 AWG wire .009 thick PVC insulation.

2.8 Spacings: Minimum spacing between terminals or between terminals and dead metal parts is 3/64" per UL 498; 250 volt rating.

2.9 Cable Strain Relief: 35 pound minimum per UL STD 514.

3.0 ELECTRICAL SPECIFICATIONS

3.1 Voltage: 250 V AC/DC Connector rating
300 V AC/DC Cable rating

3.2 Current: Central Guidelines. (consult factory if your application exceeds these values)

Wire Size	Circuits 2,3	4
#18 AWG	9 AMPS	7 AMPS
#22 AWG	5 AMPS	4 AMPS

3.3 Dielectric Strength: The Connector can withstand 1000 VRMS plus twice the rating for 1 minute applied between adjacent terminals and between terminals and the shell (per UL STD 498).

3.4 Insulation Resistance: At room temperature (25 degrees C) and 40-60% relative humidity, a minimum of 5000 megohms between terminals or terminals and ground is typical.

4.0 ENVIRONMENTAL SPECIFICATIONS:

4.1 Temperature Rating: −40 degrees C to +90 degrees C (−40 degrees F to +194 degrees F).

4.2 Rainproof: Meets rainproof requirements of UL rain test as specified in UL STD 514.

4.3 Corrosion: Zinc/Chromate finish provides 48 hour salt spray protection per MIL-STD 202 Method 101.

4.4 Vibration: Complies with MIL STD 202F, test method 204, test condition B.

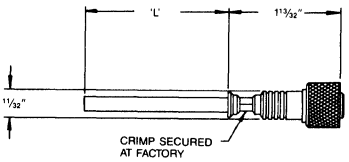
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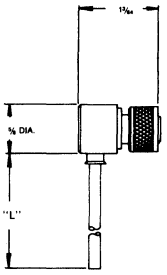
MICRO-C

THREE CONDUCTOR CABLES				SOCKET FACE	KEY FACE	PIN FACE
				US KEY STANDARD		
STYLE				STRAIGHT PLUG	RIGHT ANGLE PLUG	IN-LINE RECEPTACLE
WIRE GAGE	JACKET MATERIAL /COLOR	COLOR CODE	LENGTH	CATALOG NUMBERS		
#22	PVC Grey with Braid	1-Green 2-R/BK 3-R/WH	3 FT 6 FT 9 FT 12 FT 20 FT	08001M04 08002M04 08003M04 08004M04 08005M04	08001K04 08002K04 08003K04 08004K04 08005K04	08001Y04 08002Y04 08003Y04 08004Y04 08005Y04
#18	PVC Yellow with Braid	1-Green 2-R/BK 3-R/WH	3 FT 6 FT 9 FT 12 FT 20 FT	08071M04 08072M04 08073M04 08074M04 08075M04	08071K04 08072K04 08073K04 08074K04 08075K04	08071Y04 08072Y04 08073Y04 08074Y04 08075Y04
#22	PUR Grey without Braid	1-Green 2-Blue 3-Brown	3 FT 6 FT 9 FT 12 FT 20 FT	08051M04 08052M04 08053M04 08054M04 08055M04	08051K04 08052K04 08053K04 08054K04 08055K04	08051Y04 08052Y04 08053Y04 08054Y04 08055Y04
#22	PVC Grey with Braid	1-Green 2-Black 3-White	3 FT 6 FT 9 FT 12 FT 20 FT	08011M04 08012M04 08013M04 08014M04 08015M04	08011K04 08012K04 08013K04 08014K04 08015K04	08011Y04 08012Y04 08013Y04 08014Y04 08015Y04

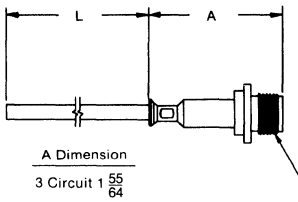
Straight Plug Assembly



Right Angle Plug Assembly

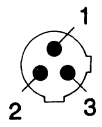


In Line Receptacle



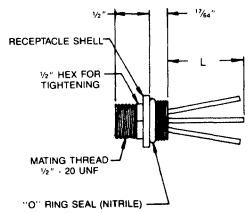
A Dimension	
3 Circuit	1 55/64
4 Circuit	1 23/32

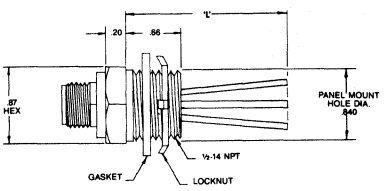
THREE CONDUCTOR STATIONARY RECEPTACLES



				US KEY STANDARD			
		STYLE		¼ INCH PIPE	9/16 24 UNEF	½ INCH PIPE	DOUBLE ENDED
		HOUSING COLOR		GREY	BLACK	GREY	BLACK
WIRE GAGE	INSUL. MATERIAL	COLOR CODE	LENGTH	CATALOG NUMBERS			
#22	PVC	1-Green 2-R/BK 3-R/WH	4 IN 1 FT —	08121M01 08122M01	08101M01 08102M01	08131M01 08132M01	08811M01
		1-Green 2-Blue 3-Brown	4 IN 1 FT —	08171M01 08172M01	08161M01 08162M01		

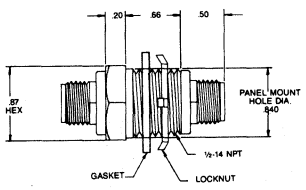
Stationary Receptacle Assembly





NOTES:
1. ALL RECEPTACLE MOUNTS COME WITH SEALS AND MOUNTING NUTS.
2. ALL CABLES HAVE PVC INSULATION OVER CONDUCTORS UNDER THE JACKET SPECIFIED.
3. ABBREVIATIONS: PVC IS POLYVINYL CHLORIDE
   PUR IS POLYURETHANE
4. PUR PROVIDES ENHANCED PERFORMANCE IN PRESENCE OF HONING OILS.
5. ALL BRAIDED CABLE IS 65% TINNED BRAID.
6. ALL CONDUCTORS ARE STRANDED #36 AWG WIRE FOR SUPERIOR FLEX.

Double Ended Receptacle



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MICRO-C

FOUR CONDUCTOR

				SOCKET FACE	KEY FACE	PIN FACE	SOCKET FACE	KEY FACE	PIN FACE
STANDARD SERVICE				DIN AC KEY STANDARD			DIN DC KEY STANDARD		
STYLE				STRAIGHT PLUG SOCKET INSERT	RIGHT ANGLE PLUG SOCKET INSERT	IN-LINE RECEPTACLE PIN INSERT	STRAIGHT PLUG SOCKET INSERT	RIGHT ANGLE PLUG SOCKET INSERT	IN-LINE RECEPTACLE PIN INSERT
WIRE GAGE	JACKET MATERIAL /COLOR	COLOR CODE	LENGTH	CATALOG NUMBERS					
#18	PVC Yellow without Braid	1-Brown 2-White 3-Blue 4-Black	3 FT 6 FT 9 FT 12 FT 20 FT	08441M14 08442M14 08443M14 08444M14 08445M14	08441K14 08442K14 08443K14 08444K14 08445K14	08441Y14 08442Y14 08443Y14 08444Y14 08445Y14	08441M24 08442M24 08443M24 08444M24 08445M24	08441K24 08442K24 08443K24 08444K24 08445K24	08441Y24 08442Y24 08443Y24 08444Y24 08445Y24
#22	PUR Grey with Braid	1-Brown 2-White 3-Blue 4-Black	3 FT 6 FT 9 FT 12 FT 20 FT	08451M14 08452M14 08453M14 08454M14 08455M14	08451K14 08452K14 08453K14 08454K14 08455K14	08451Y14 08452Y14 08453Y14 08454Y14 08455Y14	08451M24 08452M24 08453M24 08454M24 08455M24	08451K24 08452K24 08453K24 08454K24 08455K24	08451Y24 08452Y24 08453Y24 08454Y24 08455Y24
REVERSE SERVICE				DIN AC KEY STANDARD			DIN DC KEY STANDARD		
STYLE				STRAIGHT PLUG PIN INSERT	RIGHT ANGLE PLUG PIN INSERT	IN-LINE RECEPTACLE SOCKET INSERT	STRAIGHT PLUG PIN INSERT	RIGHT ANGLE PLUG PIN INSERT	IN-LINE RECEPTACLE SOCKET INSERT
WIRE GAGE	JACKET MATERIAL /COLOR	COLOR CODE	LENGTH	CATALOG NUMBERS					
#18	PVC Yellow without Braid	1-Brown 2-White 3-Blue 4-Black	3 FT 6 FT 9 FT 12 FT 20 FT	08441M34 08442M34 08443M34 08444M34 08445M34	08441K34 08442K34 08443K34 08444K34 08445K34	08441Y34 08442Y34 08443Y34 08444Y34 08445Y34	08441M44 08442M44 08443M44 08444M44 08445M44	08441K44 08442K44 08443K44 08444K44 08445K44	08441Y44 08442Y44 08443Y44 08444Y44 08445Y44
#22	PUR Grey with Braid	1-Brown 2-White 3-Blue 4-Black	3 FT 6 FT 9 FT 12 FT 20 FT	08451M34 08452M34 08453M34 08454M34 08455M34	08451K34 08452K34 08453K34 08454K34 08455K34	08451Y34 08452Y34 08453Y34 08454Y34 08455Y34	08451M44 08452M44 08453M44 08454M44 08455M44	08451K44 08452K44 08453K44 08454K44 08455K44	08451Y44 08452Y44 08453Y44 08454Y44 08455Y44

AC

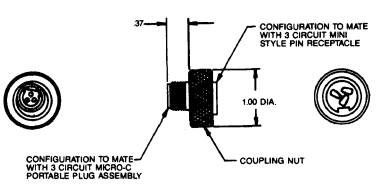
DC

FOUR CONDUCTOR STATIONARY RECEPTACLES

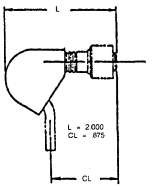
					DIN AC KEY STANDARD			DIN DC KEY STANDARD			
			STYLE		¼ INCH PIPE	½ INCH PIPE	DOUBLE ENDED	¼ INCH PIPE	½ INCH PIPE	DOUBLE ENDED	TERMINAL STYLE
			HOUSING COLOR		BLACK	BLACK	BLACK	GREY	GREY	GREY	
SHELL MATERIAL	WIRE GAGE	INSUL. MATERIAL	COLOR CODE	LENGTH	CATALOG NUMBERS						
PLASTIC	#22	PVC	1-Brown 2-White 3-Blue 4-Black	4 IN 1 FT	08521M11 08522M11	08531M11 08532M11	08812M11	08521M21 08522M21	08531M21 08532M21	08812M21	STD PIN MALE
ZINC PLATED BRASS				4 IN 1 FT 4 IN 1 FT	08621M11 08622M11 08621M31 08622M31	08631M11 08632M11 08631M31 08632M31		08621M21 08622M21 08621M41 08622M41	08631M21 08632M21 08631M41 08632M41		REVERSE SOCKET FEMALE

ACCESSORIES FOR MICRO-C	
CATALOG NUMBER	DESCRIPTION
08811M01	Double Ended Receptacle, 3 Pin US Key W/Circuit Reversal
08812M11	Double Ended Receptacle, 4 Pin AC Key W/Circuit Reversal
08812M12	Double Ended Receptacle, 4 Pin DC Key W/Circuit Reversal
08820M01	MICRO-C to MINI-C Adapter Receptacle 3 Circuit US Key
08830M01	Cord Grip for MICRO-C Cable ¼" Pipe Mounting Thd.
08855M01	90 Degree Strain Relief for PVC Cable - Straight Plug
08843M01	Dust Cap Universal

Micro to Mini Adapter

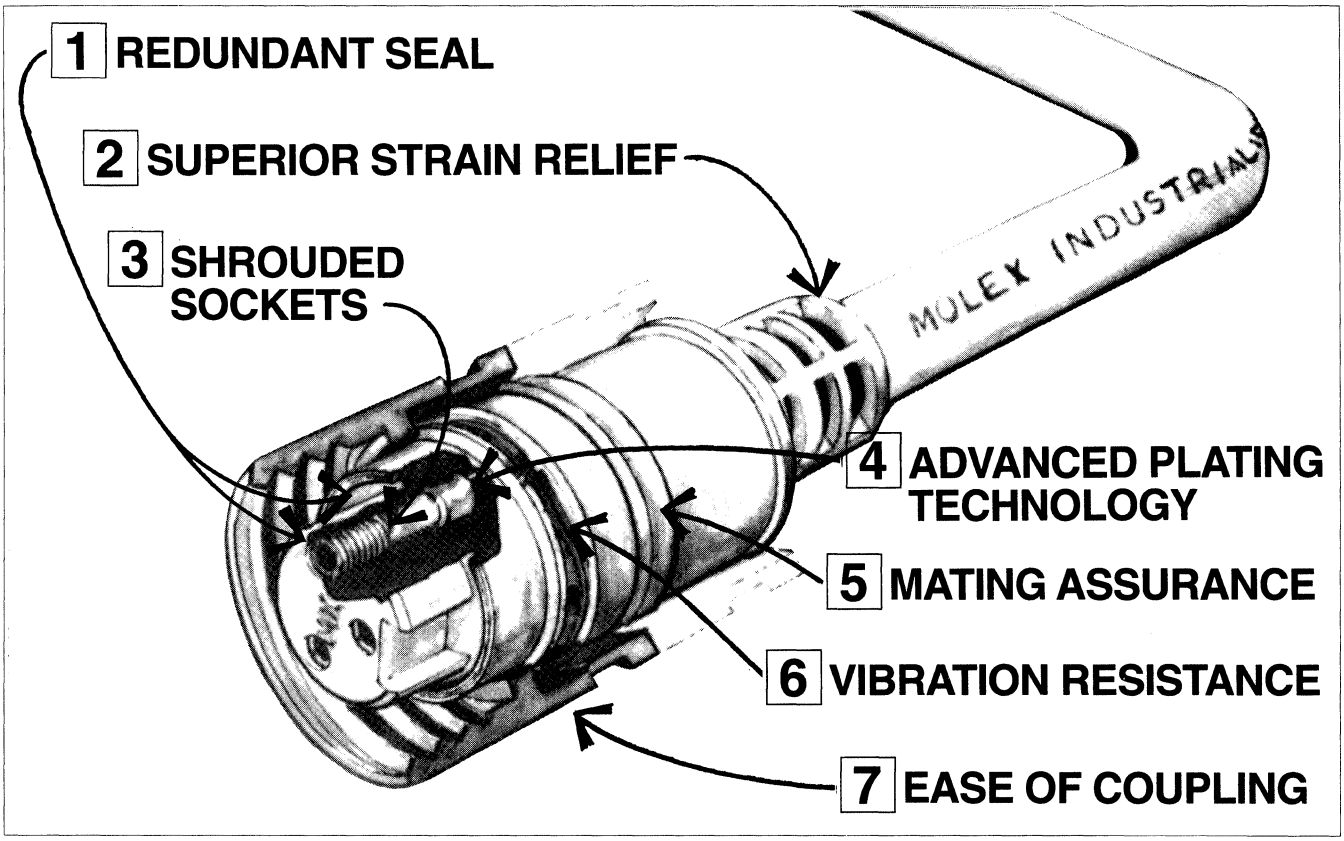


90° Strain Relief Adapter



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MINI-C
Quality Molded Connectors



Seven innovative features make their industry debut in the new Mini-C environmental connector from Molex Industrial Interfaces, Inc. This unique sealed connector boasts high quality design with superior mechanical and electrical performance for rugged industrial environments.

1 **SEALING -** Interfacial terminal seal complying with ANSI-B93, are augmented by secondary annular molded connector sealing which also eliminates contamination to the interconnect system.

2 **STRAIN RELIEF -** Progressively spaced gates and graduated window sizing provide superior bending relief and energy absorption.

3 **TERMINALS -** Machined contacts with insulation support protect against wire damage caused by repeated cord flex. Shrouded sockets eliminate contact damage due to overstressing.

4 **PLATING -** Superior plating technology enhances contact reliability. The improved plating process reduces porosity, resulting in superior quality.

5 **MATING ASSURANCE -** Positive mating is visually assured by a green line, clearly viewable during inspection when the Mini-C Connector is properly installed.

6 **COUPLING SYSTEM -** A unique spring coupling ring system maintains insert pressure and vibration resistance during long mating periods. The system compensates for the material's compression set, and maintains seal integrity for the life of the users' products.

7 **EASE OF COUPLING -** The Mini-C connector's longer coupling ring provides a larger gripping area while adding support to the plug body.

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MINI-C

Quality Molded Connectors Plug and Receptacle Cable Assemblies

PART NUMBER DESCRIPTION FOR PLUGS AND RECEPTACLES.

#

- CONTACT PLATING
- HARDWARE VARIATIONS
- CONFIGURATION / GENDER
- PLUG / RECEPTACLE (SERIES / POLES / LENGTH)

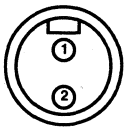
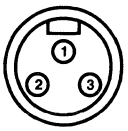
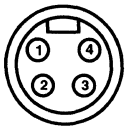
EXAMPLE: P/N 14442K01SG

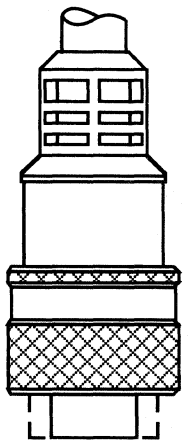
14442 K01 S G

- GOLD PLATED CONTACTS
- STAINLESS STEEL HARDWARE
- 90 DEGREE FEMALE
- MINI-C PLUG / 4 POLE / 6' CABLE LENGTH

14241 ### # #

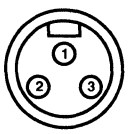
PLUG / RECEPTACLE (SERIES / POLES / LENGTH)

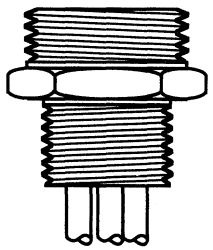
NO. POLES	FACE VIEW OF MALE	WIRING CODE	CABLE LENGTH	PLUG NO.	RECEPTACLE NO.	DUST CAPS
2		1 White 2 Black	3 ' 6 ' 9 ' 12 ' 20 '	14241 14242 14243 14244 14245	6" Leads 15211 12" Leads 15212	Plugs 14043M01 Receptacle 14044M01
3		1 Green 2 Black 3 White	3 ' 6 ' 9 ' 12 ' 20 '	14341 14342 14343 14344 14345	6" Leads 15311 12" Leads 15312	Plugs 14043M01 Receptacle 14044M01
4		1 Black 2 White 3 Red 4 Green	3 ' 6 ' 9 ' 12 ' 20 '	14441 14442 14443 14444 14445	6" Leads 15411 12" Leads 15412	Plugs 14043M01 Receptacle 14044M01
5		1 White 2 Red 3 Green 4 Orange 5 Black	3 ' 6 ' 9 ' 12 ' 20 '	14541 14542 14543 14544 14545	6" Leads 15511 12" Leads 15512	Plugs 14043M01 Receptacle 14044M01



PLUG

CONNECTORS SPECIFICALLY DESIGNED TO MEET AUTOMOTIVE STANDARDS

NO. POLES	FACE VIEW OF MALE	WIRING CODE	CABLE LENGTH	PLUG NO.	RECEPTACLE NO.	DUST CAPS
3		1 Green 2 Red 3 Red	3 ' 6 ' 9 ' 12 ' 20 '	14361 14362 14363 14364 14365	6" Leads 15361 12" Leads 15362	Plugs 14043M01 Receptacle 14044M01
5		1 Red 2 Red 3 Green 4 Red 5 Red	3 ' 6 ' 9 ' 12 ' 20 '	14561 14562 14563 14564 14565	6" Leads 15561 12" Leads 15562	Plugs 14043M01 Receptacle 14044M01



RECEPTACLE

Note: Color code of female is mirror image of male.

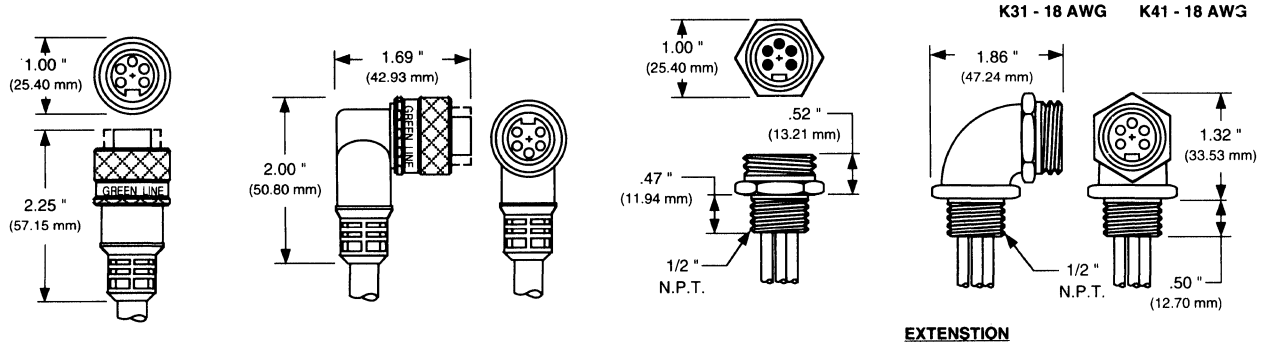
P

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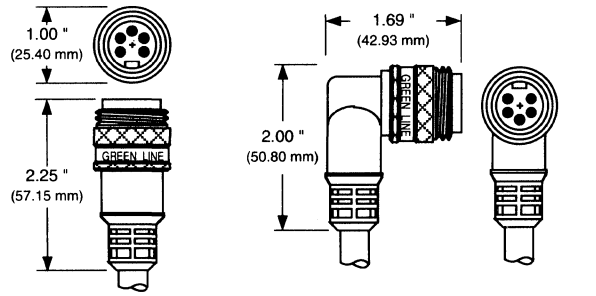
Environmental Connectors

M01 #
CONFIGURATION / GENDER

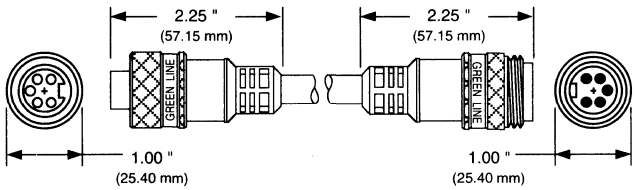
PLUG — STRAIGHT		PLUG — 90 DEGREE		RECEPTACLE — STATIONARY		RECEPTACLE — STATIONARY 90 DEGREE	
FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE
M01 - 16 AWG	M11 - 16 AWG	K01 - 16 AWG	K11 - 16 AWG	M11 - 16 AWG	M21 - 16 AWG	K11 - 16 AWG	K21 - 16 AWG
M21 - 18 AWG	M31 - 18 AWG	K21 - 18 AWG	K31 - 18 AWG	M31 - 18 AWG	M41 - 18 AWG	K31 - 18 AWG	K41 - 18 AWG



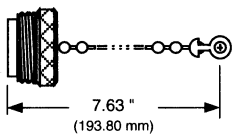
IN-LINE RECEPTACLE	IN-LINE RECEPTACLE — 90 DEGREE
MALE	MALE
Y01 - 16 AWG	K51 - 16 AWG
Y21 - 18 AWG	K61 - 18 AWG



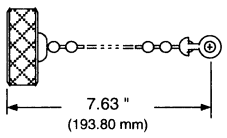
EXTENSTION
FEMALE PLUG / MALE IN-LINE RECEPTACLE
E01 - 16 AWG
E31 - 18 AWG



DUST CAP — PLUG
14043M01



DUST CAP — RECEPTACLE
14044M01



S
HARDWARE VARIATIONS
S - STAINLESS STEEL HARDWARE
N - NYLON HARDWARE

G
CONTACT PLATING VARIATIONS
G - GOLD PLATED CONTACTS
S - SILVER PLATED CONTACTS

Mechanical

Plug

Coupling Nut — anodized aluminum (Std.)
stainless steel, nylon (Opt.)
Contacts — brass, tin-plated (Std.)
gold, silver-plated (Opt.)
Molded Head — PVC

Cable

(Std) 16 AWG: PVC insulated, fine stranded copper conductors, yellow PVC jacket, 600V STO, 105°C, U.L. Recognized, C.S.A. Certified

(Opt.) 18 AWG: PVC insulated, fine stranded copper conductors with foam polypropylene fillers, yellow PVC jacket, 300V SJTO, 105°C, U.L. Recognized, C.S.A. Certified

Receptacle

Shell — anodized aluminum (Std.)
stainless steel, nylon (Opt.)
Contacts — brass, tin-plated (Std.)
gold, silver-plated (Opt.)
Inserts — PVC
Wire — 16 AWG with PVC insulation, 600V (Std.)
18 AWG with PVC insulation, 300V (Opt.)

Electrical

Voltage — 16 AWG - 600V AC/DC (Std.)
18 AWG - 300V AC/DC (Opt.)
Current — Central Guidelines.
(consult factory if your application exceeds these values.)

Wire Size	Circuit
(Std.) #16 AWG	All - 13 AMPS
(Opt.) #18 AWG	All - 9 AMPS

Environmental

Temperature Rating: -40 degrees C to +90 degrees C
(-40 degrees F to +194 degrees F)
Rainproof: Meets rainproof requirements of UL rain test as specified in UL STD 514.
Corrosion: Anodize finish provides 300 hours salt spray protection per MIL-STD 202 Method 101.
* Vibration: Complies with MIL-STD 202F, test method 204, test condition B.

Additional

* MINI-C meets NEMA 6P, enclosure requirements.
* Automotive Mass Production Equipment: Specification E11.1.1(3).
* Meets Water Tight Performance Rating Of: IP67.

Optional (Opt.): Consult Factory For Availability
* In Process Of Confirming Of Compliance

P

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Notes

MIL-C

Affordable Backshells for MIL Spec Connectors



Industrial Interfaces has developed the MIL-C series of cylindrical backshells to meet the rugged applications of the industrial enviroment. The backshells are intended for use on several different types of MIL Spec connectors as well as popular commercial cylindrical connectors manufactured by Amphenol, AMP, Cannon and Others.

In the industrial enviroment, the conventional backshells have presented performance problems when applied to cable in the areas of seal and strain relief. The Industrial Interfaces' MIL-C backshell series offers an affordable upgrade to improve the biggest single failure mode. In addition, backshells which interface directly to liquid tight conduit with no additional parts or fittings, are available.

Best of all, MIL-C backshells are designed for delivery. Days rather than months separate you from the exact parts you need.

MIL-C BACKSHELL FEATURES AND BENIFITS

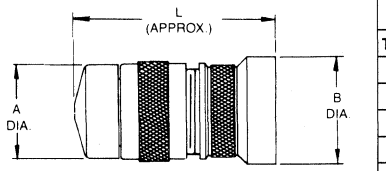
- **STOCK AVAILABILITY** modular design allows all ranges, all sizes, to always be in stock.
- **COMPETITIVE PRICES** modular design permits larger production runs with lower costs.
- **IMPROVED LEVELS OF PERFORMANCE** positive seals, greater strain relief, larger cable ranges
- **TWO CORROSION PROTECTION LEVELS** available in 48 or 500 hour salt spray rating finishes
- **ONE STOP SHOPPING** everything required for installation is included. Additional fittings or adapters are not required.

P

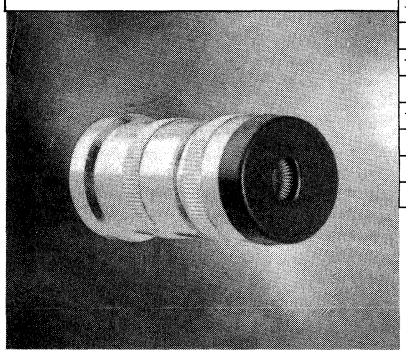
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MIL-C *Cable Backshells*

MIL-C Cable Backshells achieve extraordinary sealing and strain relief through the independent action of expandable elastomer and spring pressure loading. The stainless steel strain relief spring closes around the cable as the compression nut is threaded downward. High but controlled pressure is applied to the cable yielding superior holding power without damage to the cable.



NOTES TO CABLE DRAWING					
"B" = THREAD DIA. + 1/16					
CABLE RANGE	.225-.350	.300-.500	.500-.650	.500-.750	.700-.950
"A"	7/8	1 3/16	1 3/16	1 3/8	1 5/8



CABLE BACKSHELLS

THREAD SIZE	CATALOG NO.	CABLE RANGE	CATALOG NO.	CABLE RANGE	CATALOG NO.	CABLE RANGE	L. DIMEN APPROX. IN.
5/8-24 UNEF	70010M04	.225-.350					2
11/16-24 UNEF	70011M04	.225-.350					2
3/4-20 UNEF	70012M04	.225-.350					2
13/16-20 UNEF	70013M04	.225-.350					2
7/8-20 UNEF	70014M04	.225-.350					2 1/4
15/16-20 UNEF	70015M04	.225-.350					2
1-20 UNEF	70016M04	.300-.500	70116M04	.500-.650			2 3/8
1 1/16-18 UNEF	70017M04	.300-.500	70117M04	.500-.650			2 3/8
1 1/8-18 UNEF	70018M04	.300-.500	70118M04	.500-.650			2 3/8
1 3/16-18 UNEF	70019M04	.300-.500	70119M04	.500-.650			2 3/8
1 1/4-18 UNEF	70020M04	.300-.500	70120M04	.500-.650			2 3/8
1 5/16-18 UNEF	70021M04	.300-.500	70121M04	.500-.750	70221M04	.700-.950	2 3/8
1 3/8-18 UNEF	70022M04	.300-.500	70122M04	.500-.750	70222M04	.700-.950	2 3/8
1 7/16-18 UNEF	70223M04	.300-.500	70023M04	.500-.750	70123M04	.700-.950	2 3/8
1 1/2-18 UNEF	70224M04	.300-.500	70024M04	.500-.750	70124M04	.700-.950	2 3/8
1 5/8-18 UNEF	70226M04	.300-.500	70026M04	.500-.750	70126M04	.700-.950	3
1 3/4-18 UNEF	70128M04	.300-.500	70028M04	.500-.750	70228M04	.700-.950	3 1/8

All of the catalog numbers listed are available off-the-shelf in all ranges and sizes. In addition, several other ranges and sizes can be made on special order with only a few weeks lead time for smaller quantities. Consult factory with your specific requirement.

Selection Chart

(See Selection Chart Definition on back page)

MIL CONNECTOR DESIGNATION

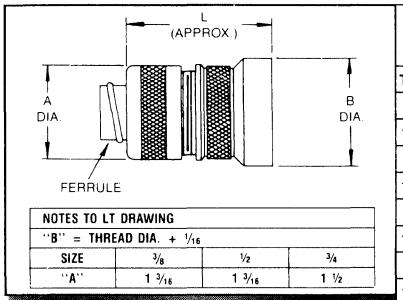
5015-C	5015-SE	5015-A-A	5015-A-E	5015-B	5015-C-A	5015-C-E	26482-1A	26482-1B	26482-2	38999-1	38999-2	83723-1	83723-2
10,10S,10SL	10SL,12,12S	10SL	10SL	10SL,12,12S		12,12S		8	10,10S,10SL			10,10S,10SL	12,12S
		12,12S	12,12S		12,12S		12			13	12		
12,12S	14,14S	14,14S	14,14S	14,14S	14,14S	14,14S		10	12,12S			12,12S	14,14S
							14			15	14		
14,14S	16,16S	16,16S	16,16S	16,16S	16,16S	16,16S		12	14,14S				16,16S
							16			17	16		
16,16S	18	18	18	18	18	18		14	16,16S			16,16S	18
18							18		18	19	18	18	
		20		20	20	20		16					20
20	20,22						20		20	21	20	20	
		22	22	22	22	22		18					22
22							22		22	23	22	22	
		24	24	24	24	24		20					24
24	24,28						24		24	25	24	24	
								22					
		28	28	28	28	28		24					28
28	32											28	

All reference shell designations are for preliminary reference only. To insure thread conformance, always measure thread of front shell whenever possible. The many variation differences between manufactures and the multitude of backshell adapters or endbells involved, especially on 5015 commercial types, may not always be reflected in these summary charts. Consult factory if you are in doubt as to the proper backshell to use.

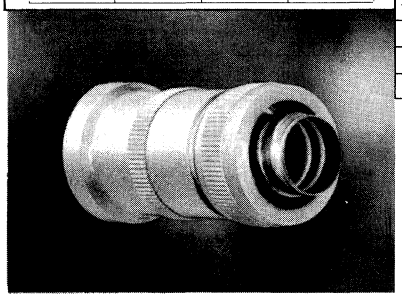
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MIL-C *Liquid-Tight Conduit Backshells*

MIL-C Liquid-Tight Conduit Backshells will accept direct attachment of various types of liquid-tight conduit. Acceptable conduit types include ALT, AT, CSA, EF, EFL, HC, HEX, LA, LOR, LT, OR, UXTL & UA.



NOTES TO LT DRAWING			
"B" = THREAD DIA. + 1/16			
SIZE	3/8	1/2	3/4
"A"	1 3/16	1 3/16	1 1/2



LIQUID-TIGHT CONDUIT BACKSHELLS

THREAD SIZE	CATALOG NO.	SIZE	CATALOG NO.	SIZE	CATALOG NO.	SIZE	L. DIMEN APPROX. IN.
1-20 UNEF	71016M04	3/8 LT	71116M04	1/2 LT			1 7/8
1 1/16-18 UNEF	71017M04	3/8 LT	71117M04	1/2 LT			1 7/8
1 1/8-18 UNEF	71018M04	3/8 LT	71118M04	1/2 LT			1 7/8
1 3/16-18 UNEF	71019M04	3/8 LT	71119M04	1/2 LT			1 7/8
1 1/4-18 UNEF	71120M04	3/8 LT	71020M04	1/2 LT	71220M04	3/4 LT	1 7/8
1 5/16-18 UNEF	71221M04	3/8 LT	71021M04	1/2 LT	71121M04	3/4 LT	1 7/8
1 3/8-18 UNEF	71222M04	3/8 LT	71022M04	1/2 LT	71122M04	3/4 LT	1 7/8
1 7/16-18 UNEF	71223M04	3/8 LT	71023M04	1/2 LT	71123M04	3/4 LT	1 7/8
1 1/2-18 UNEF	71224M04	3/8 LT	71024M04	1/2 LT	71124M04	3/4 LT	1 7/8
1 5/8-18 UNEF	71226M04	3/8 LT	71026M04	1/2 LT	71126M04	3/4 LT	2 1/2
1 3/4-18 UNEF	71228M04	3/8 LT	71028M04	1/2 LT	71128M04	3/4 LT	2 5/8

Liquid tight conduit backshells are also available for other types of non-metalic conduit including CN-P, LMN-P, POLYTUFF II, and XTRA FLEX TYPE 1. Consult factory with your application.

Selection Chart

(See Selection Chart Definition on next page)

MIL CONNECTOR DESIGNATION

5015-C	5015-SE	5015-A-A	5015-A-E	5015-B	5015-C-A	5015-C-E	26482-1A	26482-1B	26482-2	38999-1	38999-2	83723-1	83723-2
16,16S	18	18	18	18	18	18		14	16,16S			16,16S	18
18							18		18	19	18	18	
		20		20	20	20		16					20
20	20,22						20		20	21	20	20	
		22	22	22	22	22		18					22
22							22		22	23	22	22	
		24	24	24	24	24		20					24
24	24,28						24		24	25	24	24	
								22					
		28	28	28	28	28		24					28
28	32											28	

The catalog numbers above indicate a clear chromate over nickel plating system rated at a 48 hour salt spray. Other finishes are available with a few weeks lead time:

SUFFIX	DESCRIPTION	SALT SPRAY RATING
MO0	Raw Brass	——
MO2	Olive Drab Cadmium over Nickel	500 HR
MO3	Clear Nickel	500 HR
MO4	Clear Chromate over Zinc	48 HR
MO6	Olive Drab over Zinc	48 HR

P

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MIL-C *Connector Backshell Specifications*

1.0 RECOGNIZED AGENCY APPROVALS: CSA certification and UL recognition is planned.

2.0 MECHANICAL SPECIFICATIONS: Dimensions, Materials

2.1 Overall Part dimensions are given on the included drawing.

2.2 Material selection: Backshell and compression nut: Brass Alloy with corrosion protective finish.
Seals: Polychloroprene (cable) or Polyproplene (liquid tight conduit)

3.0 CABLE SECUREMENT

3.1 Each cable backshell when assembled with the smallest diameter cable in the specified range will be capable of surviving a dead weight pull of 35 lbs. for 1 minute per UL-STD-514.

3.2 Each cable backshell when assembled with midpoint of the range cable will be capable of a dead weight pull of 50 lbs. for 1 minute per UL-STD-514.

LIQUID TIGHT CONDUIT SECUREMENT
The assembly will survive a 150 lb. pull test per UL 514.

4.0 ENVIRONMENTAL SPECIFICATIONS:

4.1 Rain Tight: The backshell when assembled with the proper cable or liquid tight conduit and military connector will meet the rain test requirement defined in UL-STD-514.
Temperature Rating: –40 degrees C to +90 degrees C

4.2 Salt Spray: Two variations are available:

1) 48 hour salt spray per MIL-STD 202 Method 101

2) 500 hour salt spray per MIL-STD 1344 Method 1001

Selection Chart Definition

MIL-C SPEC	SERIES	MFGR.	DESCRIPTION	CLASS	SHELL DESIGNATIONS				
					INDUSTRIAL INTERFACES	GLENAIR	BREEZE	ESC	SUNBANK
COMMERCIAL	CPC-METAL	AMP	PLUG		CPC-P				
COMMERCIAL	CPC-METAL	AMP	RECP		CPC-R				
5015	MS34**	ALL	CRIMP PER MIL SPEC	D,K,L,U,W	5015-C	A		AF	C
5015	MS31**	ALL	SOLDER PER MIL SPEC	A,E,R	5015-SE	B-A		AD	A
5015 COMMER	97	AMPHENOL	SOLDER, NON ENVIR. W/O ENDBELL	A,B	5015-A-A	B-H	A	AA	A
5015 COMMER.	97	AMPHENOL	SOLDER, NON ENVIR. W/ ENDBELL	A,B	5015-SE	B-A		AD	A
5015 COMMER.	69	AMPHENOL	CMP/SOLDER, ENVIR. W/O ENDBELL	E,F,R	5015-A-E	B-J	B	AA	A
5015 COMMER.	69	AMPHENOL	CMP/SOLDER, ENVIR. W/ ENDBELL	E,F,R	5015-SE	B-A		AD	A
5015 COMMER.	10-72*	BENDIX	SOLDER, W/O ENDBELL	A,E,F,R	5015-B	B-L	C	AB	A
5015 COMMER.	10-72*, CS31**	BENDIX	SOLDER, W/ ENDBELL	A,B,E,F,R	5015-SE	B-A		AD	A
5015 COMMER.	MS31*	CANNON	CMP/SOLDER, NON ENVIR. W/O ENDBELL	A	5015-C-A	B-M	D	AC	A
5015 COMMER.	MS31*	CANNON	CMP/SOLDER, NON ENVIR. W/ ENDBELL	A	5015-SE	B-A		AD	A
5015 COMMER.	CA31**	CANNON	CMP/SOLDER, ENVIR. W/O ENDBELL	E,F,R	5015-C-E	B-N	E	AC	A
5015 COMMER.	CA31**	CANNON	CMP/SOLDER, ENVIR. W/ ENDBELL	E,F,R	5015-SE	B-A		AD	A
26482	1	ALL	EXCEPT MS3114, MS3124	E,F,P	26482-1A	D	H	BA/BN	K
26482	1	ALL	ONLY MS3114, MS3124	E,F,P	26482-1B	D		BB	M
26482	2	ALL		A,L	26482-2	A		AF	C
38999	I	ALL		E,P,T	38999-1	F	N	BF	F
38999	II	ALL		E,P,T	38999-2	F	N	BF	F
81703	3	ALL		E,L	5015-C	A		AF	C
83723	I & III	ALL		A,G,K,R,S	83723-1	A	R	AF	C
83723	II	ALL	B,T	A,G,R	83723-2	K		AP	P

P

Industrial Interfaces Stocking Distributors

STATE	CITY	DISTRIBUTOR	TELEPHONE
AL	BIRMINGHAM	INDUSTRIAL ELECTRIC SUPPLY	205/956-8504
AZ	PHOENIX	FORCE ELECTRONICS	602/437-1060
CA	EL SEGUNDO	FORCE ELECTRONICS, INC.	800/765-4352
	SANTA CLARA	FORCE ELECTRONICS, INC.	408/748-1324
CT	SOUTHBURY	HEILIND ELECTRONICS	203/262-1700
	WALLINGFORD	SAGER ELECTRONICS	203/265-4600
FL	FORT WALTON	UNITED LIGHTING AND SUPPLY	904/244-8155
	ORLANDO	SAGER ELECTRONICS	407/240-3114
GA	ALBANY	MACK ELECTRIC	912/883-5156
	HAZELHURST	TRIPLE H SPECIALTY	912/375-7723
	ATLANTA	SO. BELTING & TRANSMISSION	404/875-1651
IL	CHICAGO	REVERE ELECTRIC SUPPLY	312/738-3636
	DECATUR	BODINE ELECTRIC	217/423-2593
	WOOD DALE	CRESCENT ELECTRIC SUPPLY	708/595-3170
IN	INDIANAPOLIS	FARRELL ARGAST ELECTRIC	317/546-4041
KY	LEXINGTON	CED/E&H	606/293-0573
MA	BOSTON	EAGLE ELECTRIC SUPPLY	617/268-9500
	BOSTON	HEILIND ELECTRONICS	508/657-4870
	HINGHAM	SAGER ELECTRONICS	617/749-6700
MD	COLUMBIA	SAGER ELECTRONICS	301/995-4900
ME	PORTLAND	HOLMES DISTRIBUTORS	207/797-9466
MI	FLINT	ADVANCE ELECTRIC	313/238-5611
	MT. CLEMENS	ELECTRONIC CONNECTIONS	313/792-8400
	OAK PARK	CADILLAC ELECTRIC	313/967-1221
	SAGINAW	FISCHER FLACK INC.	517/752-4181
	BATTLE CREEK	GREAT LAKES ELECTRONICS	616/963-6282
NC	CHARLOTTE	WESCO	704/392-2304
	RALEIGH	SAGER ELECTRONICS	919/850-9550
		WESCO	919/839-7600
NH	MANCHESTER	HOLMES DISTRIBUTORS	603/669-5060
	HUDSON	NORTH AMERICAN INTERCONNECT	603/880-9010
	SALEM	SAGER ELECTRONICS	603-898-1348
NJ	PENNSAUKEN	IMS DISTRIBUTION	800/752-1770
	PATERSON	FELDMAN BROTHERS	201/742-7329
NY	ELMIRA	WEHLE ELECTRIC	607/733-6646
	HAUPPAUGE	SAGER ELECTRONICS	516/348-1300
	ROCHESTER	WEHLE ELECTRIC	716/461-0200
	PITTSFORD	HELP ELECTRONICS	716/264-9300

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affordable connectors for rugged environments
641 North Poplar Street Orange, California 92668 (714) 937-9393 FAX (714) 978-9107

Industrial Interfaces Stocking Distributors

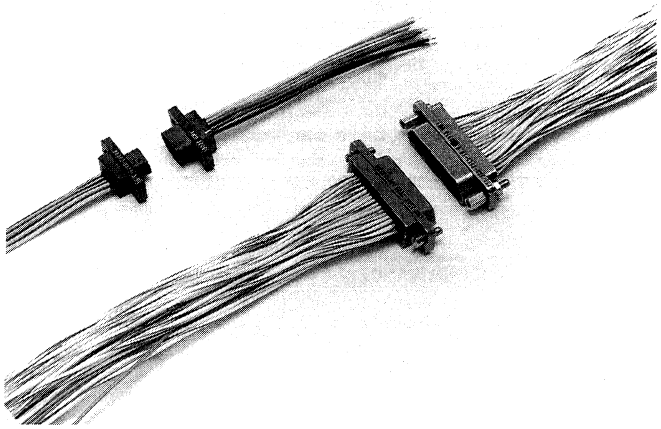
STATE	CITY	DISTRIBUTOR	TELEPHONE
OH	CINCINNATI	F.D. LAWRENCE CO.	513/542-1100
		RICHARDS ELECTRIC	513/242-8800
	CLEVELAND	GATEWAY MEGATECH	216/953-0333
		MILNER ELECTRIC	216/361-0300
	COLUMBUS	BASIC DISTRIBUTION	614/442-3380
	DAYTON	ALL PHASE ELECTRIC	513/228-5141
		BASIC DISTRIBUTION	513/228-0938
	TOLEDO	DECO	419/729-7151
	SOLON	MIDLAND ELECTRIC SUPPLY	216/248-3800
PA	MARS	SAGER ELECTRONICS	412/772-2233
	PITTSBURGH	MOSEBACH ELECTRIC	412/488-5000
	PHILADELPHIA	SAGER ELECTRONICS	215/464-4336
SC	SPARTANBURG	McNAUGHTON-McKAY	803/574-0350
TN	CHATTANOOGA	RICHARDSON ELECTRIC	615/629-2521
	NASHVILLE	STUART IRBY	615/833-2484
TX	AUSTIN	FORCE ELECTRONICS	512/836-5311
	FARMERS BRANCH	FORCE ELECTRONICS	800/547-5122
WI	MILWAUKEE	HOLT ELECTRIC	414/771-6600
		GRAYBAR ELECTRIC	414/778-1330

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Micro/Nano Miniature Connectors

Ulti Mate Inc.
Orange, CA
714-937-9388

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50 Mil Circuit Series

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Style 8 & 18 . . . . . 13Q
Style 4 & 5 . . . . . 14Q
Style 1 & 11 . . . . . 15Q

50 Mil "S" Series Strip Connectors

S Series 16Q

25 Mil "N" Series Nano Connectors

N Series 18Q

50 Mil "RT" and "RQ" Series Circular Connectors

RT, RQ Series 20Q

"JSB" and "JSS" Series Center Jackscrew Connectors

JSB, JSS Series 22Q

Micro/Nano Miniature Connectors

Ulti Mate Inc.
Orange, CA
714-937-9388

Introduction

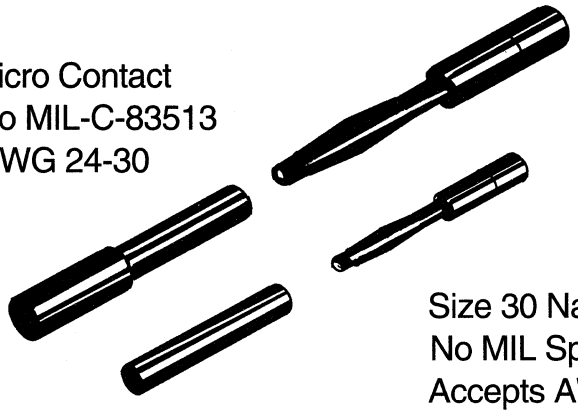
The Ulti Mate team is the most experienced in the 50/25 mil center connector field. We are proud of the fact that we have the broadest selection of micro and nano pin and socket devices on the market, utilizing the most reliable contact design. Quality products, with a proven service record, will provide the solution to your micro and nano connector needs.

Mite-Y-Pin™ Contacts

Reliability is achieved through simplicity, consistency and producibility in these one piece, spring contacts. The #24 micro contact, for use on the .050" center connectors, has four equally spaced tines that provide excellent wiping action when mated to its tubular counterpart.

The #30 nano contact for use on .025" center connectors have three tines. The low mass of these contacts and the three or four tines assure no interruption in shock and vibration modes. The #24 accommodates AWG wire sizes 24 thru 30 gauge and the #30 accommodates 30 thru 36.

Size 24 Micro Contact
Qualified to MIL-C-83513
Accepts AWG 24-30



Size 30 Nano Contact
No MIL Spec. Assigned
Accepts AWG 30-36

The "reverse gender" having a recessed spring pin and exposed rugged socket, make these small connectors more rugged and less subject to damage than the larger traditional pin and socket connectors.

Benefits & Applications

Benefits

- High density
- Light weight
- Shorter signal path
- High reliability
- Cost effective

Applications

- Equipment requiring a high degree of miniaturization
- Space and missile equipment
- High performance aircraft
- High speed computers
- Medical electronics
- Deep submergence oceanographic equipment
- Telecommunications equipment

Ulti Mate Inc.
Orange, CA
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Performance Data/ All Connectors

Size 24 Micro Contacts on .050" 1,27mm Centers

Electrical

Contact Resistance: 8 milliohms max. at 2.5 amperes
Current Rating: 3.0 amperes max.
Dielectric Withstanding Voltage: 600 VAC at sea level
150 VAC at 70,000 feet per MIL-C-83513
Insulation Resistance: 5,000 Megohms min.

Mechanical

Engagaing Forces: 6 oz. max. per MIL -C- 83513
Separating Forces: 5 oz. min. per MIL -C- 83513
(Mite-Y-Pin average is 3 oz.)
Mating and Unmating Forces per MIL-C-83513:
Mate = 10 oz. x number of contacts max.
Unmate = 0.5 oz. x number of contacts min.

Shock & Vibration / Size 24 & 30

Vibration: No damage or interruption detected (one microsecond sensitivity) when subjected to method 2005, test condition IV of MIL-STD-1344.
Shock: No damage or interruption detected (one microsecond sensitivity) when subjected to method 2004, of MIL-STD-1344.
Durability: No mechanical defects after 500 matings; Test criteria are: mating force, contact resistance, contact engagement, and separation forces.
Salt Spray: No exposure of base metal due to corrosion; no loss of performance as in durability above.

Size 30 Nano Contacts on .025" 0,64mm Centers

Electrical

Contact Resistance: 30 Milliohms max at 1 ampere
Current Rating: 1 ampere
Dielectric Withstanding Voltage: 300 VAC at Sea Level, 75 VAC at 70,000 feet
Insulation Resistance: 5000 Megohms min.

Mechanical

Engagaging Forces: 1 oz. average
Separating Forces: 0.5 oz min.

Quality Control

Ulti Mate, Inc. products exceed the MIL-I-45208 requirements.

Materials & Finishes

Pin Contacts: Beryllium copper (C-17200) per QQ-C-533.
Socket Contacts: Copper alloy (C-21000) or leaded commercial bronze (C-31400)
Contact Plating: Gold plated per Mil-G-45204.
50 microinches is the standard thickness.
Metal Shells: Aluminum alloy per QQ-A200 / 8, Type 6061-T6. Standard finish is cadmium per QQ-P-416 with yellow chromate.

Insulator Material: Preferred material is RYTON * polyphenylene sulfide per MIL-M-24519 GST 40F
Color: Black polyester, per MIL-M-24519 GFP 30F also available.
Interfacial Seals: Flourosilicone elastomer per MIL-R-25988 standard on "M" Series socket face.
Hardware: Stainless steel passivated.

* Ryton is a registered trademark of the Phillips Petroleum Company.

.050" 1,27 mm Center Rectangular PCB Connectors

Ulti Mate Inc.
Orange, CA
714-937-9388

Mating Information

Microminiature Rectangular Connector Selection Guide

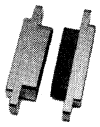
Select the type of rectangular connector you require. Note: The "P" Series of MIL-C-83513 is not designed to mate with the MIL-C-83513 "M" Series. Shown at the bottom are the P.C. board-mount styles.

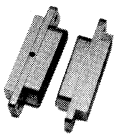


"P" Series
Plastic Shell
Qualified to
MIL-C-83513

Mates with

"A" Series
Metal Shell
No MIL Spec





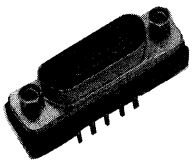
"M" Series
Metal Shell
Qualified to
MIL-C-83513

Mates with

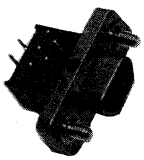
"B" Series
Plastic Shell
No MIL Spec



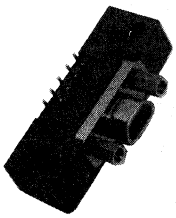
The above Series will mate with the Circuit Series as shown here.



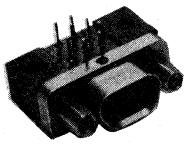
***New Style 6 (ST)**
Vertical mount
with Jackposts.
M&B



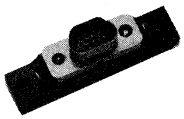
***New Style 18 (RTS)**
Right angle
version of Style 6
only with Jackscrews.
P,A,M,B



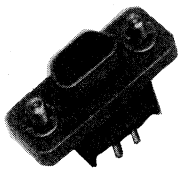
Old Style 5 (BR)
Right angle mount
version of Style 4
Extended footprint.
P,A,M,B



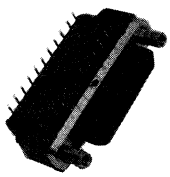
***New Style 8 (RT)**
Right angle
version of Style 6
with Jackposts.
Same footprint
advantage.
P,A,M,B



Old Style 4 (BS)
Vertical mount
with mounting ears and holes.
Extended footprint.
P,A,M,B



***New Style 16 (STS)**
Vertical mount
version of Style 6
only with Jackscrews.
M&B



Old Style 1 (CBR)
Right angle mount
with mounting holes.
Extended footprint.
P,A,M,B

*Advantage: Footprint is contained within the envelope of the connector body.

Q

.050" 1,27 mm Center Rectangular Connectors

Ulti Mate Inc.
Orange, CA
714-937-9388

Ordering Information

M R 25 P 05-26 E 5- 18.0 S01

Series Designation
P = Plastic Shell (MIL-C-83513)
A = Metal Shell (Non MIL)
M = Metal Shell (MIL-C-83513)
B = Plastic Shell (Non MIL)

Insulator Material
R = Ryton P.P.S. MIL-C-24519 GTS-04F *
P = Polyester MIL-M-24519 GTP-30F

Size
Number of Contacts...5 - 65 is 2 row, 100 position is 4 row
For 3 row 51 contacts, use 51-3.
100 position is not available in the A or P Series.

Contact Type
P = Pin, Crimp N = Pin, Solder Cup **
S = Socket, Crimp T = Socket, Solder Cup**

Mounting/Coupling Hardware

For 5 thru 65 Sizes (2 - 56 threads)	For 100 Sizes (4 - 40 threads)
0 = None	
02 = Jackscrew Assy., Low Profile Allen Head. . . .	= 12 *
03 = Jackscrew Assy., High Profile Allen Head	= 13
05 = Jackscrew Assy., Low Profile Slotted.	= 15 *
06 = Jackscrew Assy., High Profile Slotted	= 16
07 = Jackscrew Assy.	= 17 *

* = Indicates preferred standard
** = Solder Cups are supplied without wire for customer termination . . 26 AWG Max.

Modification Codes
See Page 6Q

Wire Length
3 Digits 18.0" or M46 (cm)

Wire Color
1 = All White
2 = All Yellow
3 = Tin Plated Solid Wire
4 = Gold Plated Solid Wire
5 = Color Coded per MIL-STD-681C
6 = Solid Colors Repeat / No Stripes

Wire Type
B = PVC
C = Solid Copper (Uninsulated) QQ-W-343
E = Type "E" Teflon[1] per MIL-W-16878/4 *
F = Type "ET" Teflon per MIL-W-16878/6
G = Ribbon Cable per MIL-C-49055
J = Type "E" 19 Strand
K = Type "ET" 19 Strand
M = Teflon per MIL-W-22759/11
S = Teflon Insulated Solid Copper
Y = Tefzel[2] per MIL-W-22759/33

Wire Size
24, 25, 26* ,28, 30 AWG

Substitute this section in place of the "Size" section above to order Combo Coax or Power.

Example* MR 2C 13 P 05

No. (1 to 10) & whether Coax or Power required
C = Coax Contacts (RG196/U is Standard). If RG178/U required, Insert C (178)
P = Power Contacts, Size #16 Example = MR2P13P05
No. of Micro Contacts
Hardware
Coax or Power Contacts replace 6 Micro Contacts
See explanation on page 6Q

* Example would have 2 coax and 13 micro contacts in a size 25 contact micro connector & low profile slotted jackscrews.

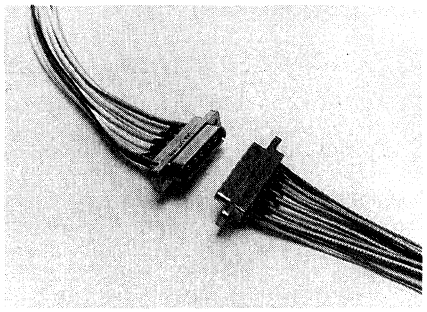
1 Teflon is a registered trademark of E. I. DuPont de Nemours and Company.
2 Tefzel is a registered trademark of E. I. DuPont de Nemours and Company.

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.050" 1,27 mm Center Rectangular Connectors

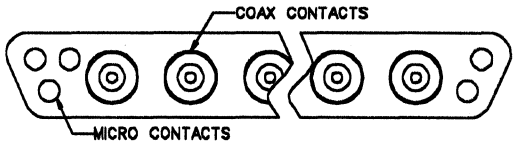
Ulti Mate Inc.
Orange, CA
714-937-9388

Variations / Modifications



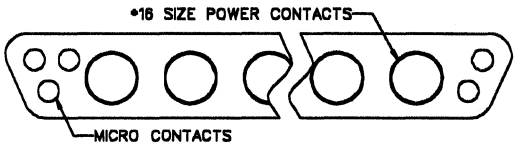
Combination Micro & Coax Contacts

Expandable tooling allows us to offer low cost modifications. Select any of our two row, Series M, metal shell connectors that have 5 to 65 contacts and use this formula: A coax contact replaces 6 micro contacts. Example: an 11 contact unit may have 1 coax and minimum of 5 micro contacts... a 35 position unit may have up to 5 coax and 5 micro contacts... a 65 contact connector may have up to 10 coax and 5 micro contacts, etc. Coaxial contacts are for use with RG178/U and RG196/U miniature cables. Most applications require the use of jackscrew and jackpost hardware.
See part number explanation at bottom of page 5Q. Example: MR 3C 15 P 05=3 coax, 15 micro contacts. This will be a size 33 connector.



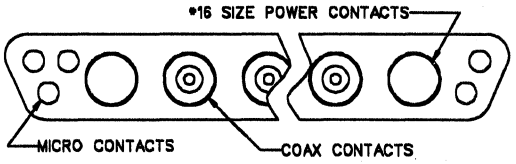
Combination Micro & Power Contacts

The same formula applies to mixing power contacts with micro contacts as it does with the coax units above. A power contact replaces 6 micro contacts. Power contacts are size #16 pins and sockets. Example: MR 2P 15 P 05 = 2 power & 15 micro contacts. This will be a size 27 connector. See part number explanation at bottom of page 5Q.



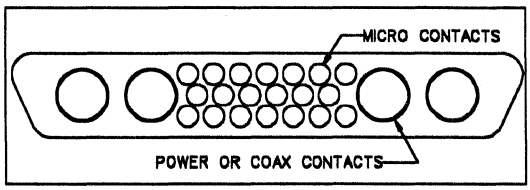
Combination Micro, Coax, & Power Contacts

Again, a coax or power contact replaces 6 micro contacts. Therefore, a connector with 2 power, 3 coax, and 7 micro contacts would use a size 37 shell. Example: MR2P3C7P05 - 2 pins, 3 coaxes and 7 micro contacts in the size 37 shell.



Three Row Configuration

In addition to the variable 2 row configurations up to 65 positions, there is available one layout in the 3 row 51 shell with 4 power and/or coax combinations and 20 micro contacts.



Additional Modifications

Float-Mount Bushings (Code F01)

Stainless steel float-mount bushings may be ordered for applications requiring the mounted connector to float for alignment with the mating connector. Add the code F01 to the part number. Float bushings are installed at the factory. Reverse float-mounts are coded F01R.

Special Shell Finishes

S01 Electroless Nickel
S02 Chemical Conversion - Alodine / Iridite
S03 Hard Anodized Black
S04 Gold
S05 Tin

Q

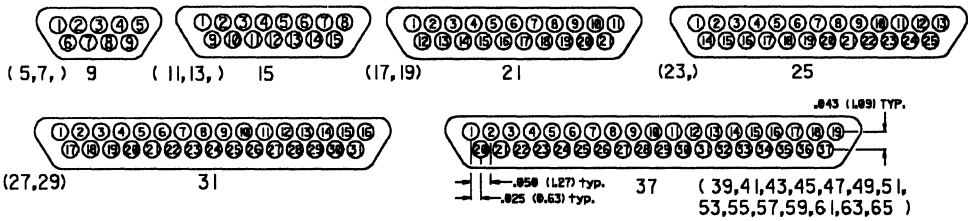
Refer to Page 5Q for ordering information.

.050" 1,27 mm Center Rectangular Connectors

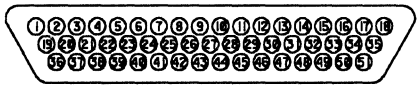
Ulti Mate Inc.
Orange, CA
714-937-9388

Standard Pin Layouts (Face View of Pin Insulator)

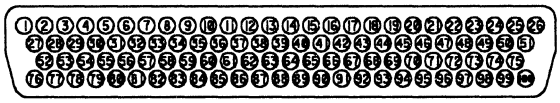
Note: The layouts shown are standard per Mil-C-83513, however, you may order any number of contacts from 5 to 65 in odd increments: 5,7,9,11,15, etc. up to 65, in the 2 row configuration. The other 2 standards are the 3 row 51 (51-3) and the 4 row 100. Socket side of connector is a mirror image.



Note: Contact numbers are for reference only and do not appear on the insulator or connector body. Layouts are enlarged for clarity.



51 Three Row



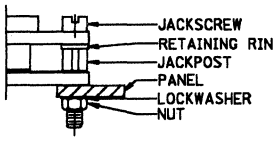
100 Four Row

Mounting / Coupling Hardware

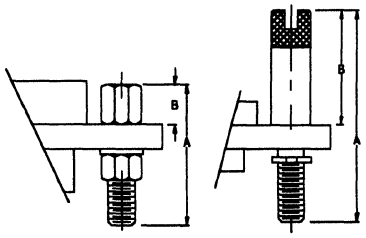
Hardware for the rectangular series is qualified to MIL-C-83153. Ulti mate part numbers are the same as the MIL spec. with the exception of the prefix, ie: MIL-C-83153/5-07 is Ulti Mate's UMI 83513/5-07. Each part number is a set of two assemblies.

Jackscrews or jackposts fit either plugs or receptacles. Float mount hardware is not currently covered by the MIL spec. and is installed at the factory. To order, add the suffix FO1 to the connector part number. Rear panel-mount jackposts are also available.

Panel Mounting

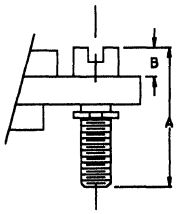


Front Mount

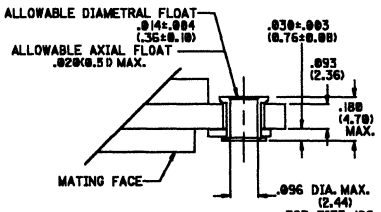


Jackpost

Jackscrew High Profile

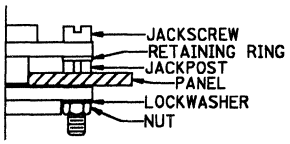


Jackscrew Low Profile



Float Mount

Panel Mounting



Rear Mount (Consult Factory)

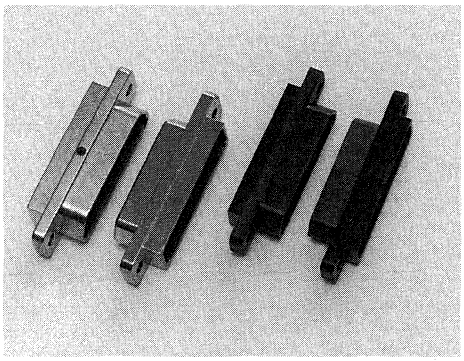
Description	Part Number	Dim A Max.		Dim B Max.		Thread	Row Size
Jackscrew Lo Allen	M83513 / 05-02	0.361	9.17	0.103	2.62	2-56 UNC-2A	2 & 3
Jackscrew Hi Allen	M83513 / 05-03	0.868	22.05	0.610	15.49	2-56 UNC-2A	2 & 3
Jackscrew Lo Slot	M83513 / 05-05	0.361	9.17	0.103	2.62	2-56 UNC-2A	2 & 3
Jacksrew Hi Slot	M83513 / 05-06	0.868	22.05	0.610	15.49	2-56 UNC-2A	2 & 3
Jackpost	M83513 / 05-07	0.500	12.70	0.190	4.83	2-56 UNC-2B	2 & 3
Jackscrew Lo Allen	M83513 / 05-12	0.390	9.91	0.103	2.62	4-40 UNC-2A	4
Jackscrew Hi Allen	M83513 / 05-13	0.902	22.91	0.610	15.49	4-40 UNC-2A	4
Jackscrew Lo Slot	M83513 / 05-15	0.390	9.91	0.103	2.62	4-40 UNC-2A	4
Jackscrew Hi Slot	M83513 / 05-16	0.902	22.91	0.610	15.49	4-40 UNC-2A	4
Jackpost	M83513 / 05-17	0.500	12.70	0.185	4.70	4-40 UNC-2B	4

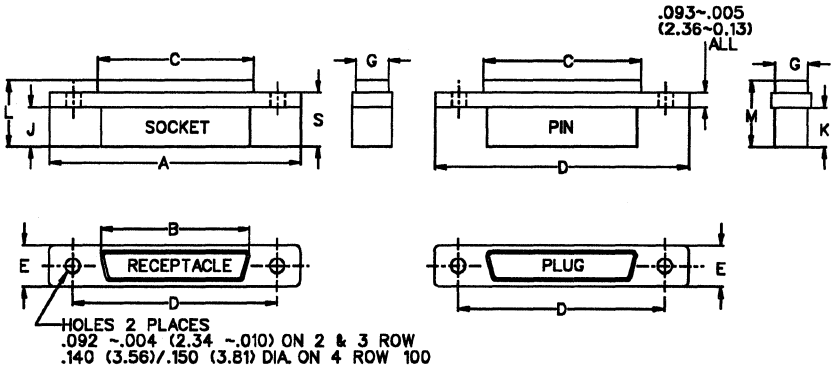
Refer to Page 5Q for ordering information.

.050" 1,27 mm Center Rectangular Connectors

Ulti Mate Inc.
Orange, CA
714-937-9388

P, A, M, B Series 50 Mil Rectangular Connectors
P and M Series are qualified to MIL-C-83513

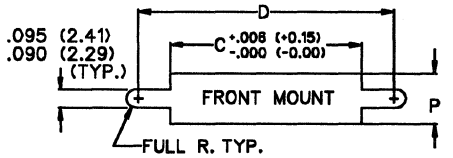


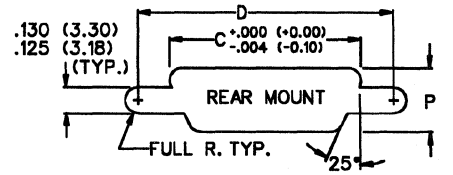


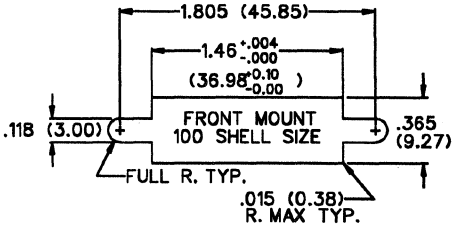
Dimensions Inches mm

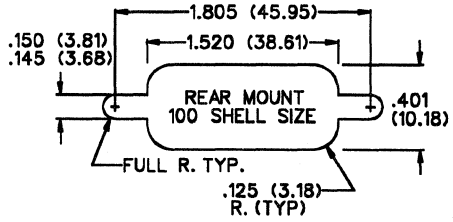
		All	P & A Series		M & B Series		All
Row	Size	Dim A Max.	Dim B Max.	Dim C Max.	Dim B Max.	Dim C Max.	Dim D Max.
2	5	0.685 17.40	0.276 7.01	0.305 7.75	0.302 7.67	0.300 7.62	0.465 11.81
2	7	0.735 18.67	0.326 8.28	0.355 9.02	0.352 8.94	0.350 8.89	0.515 13.08
2	9	0.785 19.94	0.376 9.55	0.405 10.29	0.402 10.21	0.400 10.16	0.565 14.35
2	11	0.835 21.21	0.426 10.82	0.455 11.56	0.452 11.48	0.450 11.43	0.615 15.62
2	13	0.885 22.48	0.476 12.09	0.505 12.83	0.502 12.75	0.500 12.70	0.665 16.89
2	15	0.935 23.75	0.526 13.36	0.555 14.10	0.552 14.02	0.550 13.97	0.715 18.16
2	17	0.985 25.02	0.576 14.63	0.605 15.37	0.602 15.29	0.600 15.24	0.765 19.43
2	19	1.035 26.29	0.626 15.90	0.655 16.64	0.652 16.56	0.650 16.51	0.815 20.70
2	21	1.085 27.56	0.676 17.17	0.705 17.91	0.702 17.83	0.700 17.78	0.865 21.97
2	23	1.135 28.83	0.726 18.44	0.755 19.18	0.752 19.10	0.750 19.05	0.915 23.24
2	25	1.185 30.10	0.776 19.71	0.805 20.45	0.802 20.37	0.800 20.32	0.965 24.51
2	27	1.235 31.37	0.826 20.98	0.855 21.72	0.852 21.64	0.850 21.59	1.015 25.78
2	29	1.285 32.64	0.876 22.25	0.905 22.99	0.902 22.91	0.900 22.86	1.065 27.05
2	31	1.335 33.91	0.926 23.52	0.955 24.26	0.952 24.18	0.950 24.13	1.115 28.32
2	33	1.385 35.18	0.976 24.79	1.005 25.53	1.002 25.45	1.000 25.40	1.165 29.59
2	35	1.435 36.45	1.026 26.06	1.055 26.80	1.052 26.72	1.050 26.67	1.215 30.86
2	37	1.485 37.72	1.076 27.33	1.105 28.07	1.102 27.99	1.000 25.40	1.265 32.13
2	39	1.535 38.99	1.126 28.60	1.155 29.34	1.152 29.26	1.150 29.21	1.315 33.40
2	41	1.585 40.26	1.176 29.87	1.205 30.61	1.202 30.53	1.200 30.48	1.365 34.67
2	43	1.635 41.53	1.226 31.14	1.255 31.88	1.252 31.80	1.250 31.75	1.415 35.94
2	45	1.685 42.80	1.276 32.41	1.305 33.15	1.302 33.07	1.300 33.02	1.465 37.21
2	47	1.735 44.07	1.326 33.68	1.355 34.42	1.352 34.34	1.350 34.29	1.515 38.48
2	49	1.785 45.34	1.376 34.95	1.405 35.69	1.402 35.61	1.400 35.56	1.565 39.75
2	51	1.835 46.61	1.426 36.22	1.455 36.96	1.452 36.88	1.150 29.21	1.615 41.02
3	51	1.435 36.45	1.026 26.06	1.048 26.62	1.052 26.72	1.050 26.67	1.215 30.86
2	53	1.885 47.88	1.476 37.49	1.505 38.23	1.502 38.15	1.505 38.23	1.665 42.29
2	55	1.935 49.15	1.526 38.76	1.555 39.50	1.552 39.42	1.555 39.50	1.715 43.56
2	57	1.985 50.42	1.576 40.03	1.605 40.77	1.602 40.69	1.605 40.77	1.765 44.83
2	59	2.035 51.69	1.626 41.30	1.655 42.04	1.652 41.96	1.655 42.04	1.815 46.10
2	61	2.085 52.96	1.676 42.57	1.705 43.31	1.702 43.23	1.705 43.31	1.865 47.37
2	63	2.135 54.23	1.726 43.84	1.755 44.58	1.752 44.50	1.755 44.58	1.915 48.64
2	65	2.185 55.50	1.776 45.11	1.805 45.85	1.802 45.77	1.805 45.85	1.965 49.91
4	100	1.165 29.59	2.165 54.99	0.000 0.00	1.505 38.23	1.442 36.63	1.800 45.72

Series & No. of Rows	Dim E Max.	Dim J Max.	Dim K Max.	Dim L Max.	Dim M Max.	Dim G Max.
2 P & A	.218 5.54	.183 4.65	.204 5.18	.375 9.53	.395 10.03	.173 4.39
2 M & B	.308 7.82	.198 5.03	.186 4.72	.429 10.90	.416 10.57	.270 6.86
3 P & A	.260 6.60	.183 4.65	.204 5.18	.375 9.53	.395 10.03	.220 5.59
3 M & B	.351 8.92	.198 5.03	.186 4.72	.429 10.90	.416 10.57	.310 7.87
4 M & B	.394 10.01	.198 5.03	.186 4.72	.429 10.90	.416 10.57	.360 9.14









Panel Mounting

P = .175 4.45 for P&A, 2 Row Front Mounting
P = .280 7.11 for M&B, 2 Row Front Mounting
P = .225 5.72 for P&A, 3 Row Front Mounting
P = .320 8.13 for M&B, 3 Row Front Mounting
P = .219 5.56 for P&A, 2 Row Rear Mounting
P = .265 6.73 for M&B, 2 Row Rear Mounting
P = .265 6.73 for P&A, 3 Row Rear Mounting
P = .305 7.75 for M&B, 3 Row Rear Mounting

Refer to Page 5Q for ordering information.

Q

.050" 1,27mm Center Rectangular Connectors

Ulti Mate Inc.
Orange, CA
714-937-9388

Cross Reference / MIL-C-83513 to Ulti Mate Part Number

Note: When MIL designation ends in "N" (indicating electroless nickel shell finish) instead of "C" add "S01" to the Ulti Mate Part Number when ordering.

Examples:

MIL Designation		Ulti Mate Part Number
M83513/01-AC	=	MR9N 0 "0" added for no hardware
M83513/01-AN	=	MR9N 0S01
M83513/01-A 01	=	MR9P 0-26M1-18.0
M83513/01-D 16 C	=	MR25P-26Y6-72.0

MIL C-83513 Ordering System

*See new wire sizes 09 thru 16, on bottom of page.

M83513 03 -B 01 C

- C — Shell Finish: S01, S02, S03, S04 - Refer to Page 6Q
- 01 — Wire Type: 03, 04, 08, 09 only
- -B — Insert Arrangement
- 03 — MIL-C-83513 Slash Sheet

MIL-C-83513 Slash Sheets

01 = Plug, Pin Contact, Solder Cup, Metal Shell (Not Wired)
02 = Receptacle, Socket Contact, Solder Cup, Metal Shell (Not Wired)
03 = Plug, Pin Contact, Metal Shell (Wired)
04 = Receptacle, Socket Contact, Metal Shell (Wired)
05 = Mounting Hardware (See Page 7Q)
06 = Plug, Pin Contact, Metal Shell (Not Wired)
07 = Receptacle, Socket Contact, Solder Cup, (Not Wired)
08 = Plug, Pin Contact, (Wired)
09 = Receptacle, Socket Contact, (Wired)

Insert Arrangement

A = 9 Contact
B = 15 Contact
C = 21 Contact
D = 25 Contact
E = 31 Contact
F = 37 Contact
G = 51 Contact
H = 100 Contact

Wire Type

Blank = Solder Cup Termination
01 = 18" Length, #26 AWG Wire per MIL-W-22759 / 11-26-9, Color White
02 = 36" Length, #26 AWG Wire per MIL-W-22759 / 11-26-9, Color White
03 = 18" Length, #26 AWG Wire per MIL-W-22759 / 11-26-( ), Color Coded
04 = 36" Length, #26 AWG Wire per MIL-W-22759 / 11-26-( ), Color Coded
05 = 0.5" Length, #25 AWG Wire per QQ-W-343, Type S Gold Plated
06 = 1.0" Length, #25 AWG Wire per QQ-W-343, Type S Gold Plated
07 = 0.5" Length, #25 AWG Wire per QQ-W-343, Type S Tin Plated
08 = 1.0" Length, #25 AWG Wire per QQ-W-343, Type S Tin Plated
09 = 18" Length, #26 AWG Wire per MIL-W-22759 / 33-26-9, Color White
10 = 36" Length, #26 AWG Wire per MIL-W-22759 / 33-26-9, Color White
11 = 18" Length, #26 AWG Wire per MIL-W-22759 / 33-26-( ), Color Coded
12 = 36" Length, #26 AWG Wire per MIL-W-22759 / 33-26-( ), Color Coded
13 = 72" Length, #26 AWG Wire per MIL-W-22759 / 33-26-9, Color White
14 = 72" Length, #26 AWG Wire per MIL-W-22759 / 33-26-( ), Color Coded
15 = 72" Length, #26 AWG Wire per MIL-W-22759 / 33-26-9, Color White
16 = 72" Length, #26 AWG Wire per MIL-W-22759 / 33-26-( ), Color Coded

Note: When ordering a connector by proper MIL spec. number, hardware must be ordered seperately.

* New wire sizes

MIL wire type	UMI suffix
09	Y1 - 18.0
10	Y1 - 36.0
11	Y5 - 18.0
12	Y5 - 36.0
13	M1 - 72.0
14	M5 - 72.0
15	Y1 - 72.0
16	Y5 - 72.0

.050" 1,27 mm Center Rectangular Connectors

Ulti Mate Inc.
Orange, CA
714-937-9388

Solder Cup, wired and PCB connectors
Cross Reference / MIL-C-83513 to Ulti Mate Part Number

Government Designation	Ulti Mate Part Number
M83513/01-A C	MR9N
M83513/01-B C	MR15N
M83513/01-C C	MR21N
M83513/01-D C	MR25N
M83513/01-E C	MR31N
M83513/01-F C	MR37N
M83513/01-G C	MR51-3N
M83513/01-H C	MR100N
M83513/02-A C	MR9T
M83513/02-B C	MR15T
M83513/02-C C	MR21T
M83513/02-D C	MR25T
M83513/02-E C	MR31T
M83513/02-F C	MR37T
M83513/02-G C	MR51-3T
M83513/02-H C	MR100T
M83513/03-A 01	MR9P26MI-18.0
M83513/03-A 02	MR9P26M1-36.0
M83513/03-A 03	MR9P26M6-18.0
M83513/03-A 04	MR9P26M6-36.0
M83513/03-A 05	MR9P25C4-0.5
M83513/03-A 06	MR9P25C4-1.0
M83513/03-A 07	MR9P25C3-0.5
M83513/03-A 08	MR9P25C3-1.0
M83513/03-B 01	MR15P26M1-18.0
M83513/03-B 02	MR15P26M1-36.0
M83513/03-B 03	MR15P26M6-18.0
M83513/03-B 04	MR15P26M6-36.0
M83513/03-B 05	MR15P25C4-0.5
M83513/03-B 06	MR15P25C4-1.0
M83513/03-B 07	MR15P25C3-0.5
M83513/03-B 08	MR15P25C3-1.0
M83513/03-C 01	MR21P26M1-18.0
M83513/03-C 02	MR21P26M1-36.0
M83513/03-C 03	MR21P26M6-18.0
M83513/03-C 04	MR21P26M6-36.0
M83513/03-C 05	MR21P25C4-0.5
M83513/03-C 06	MR21P25C4-1.0
M83513/03-C 07	MR21P25C3-0.5
M83513/03-C 08	MR21P25C3-1.0
M83513/03-D 01	MR25P26M1-18.0
M83513/03-D 02	MR25P26M1-36.0
M83513/03-D 03	MR25P26M6-18.0
M83513/03-D 04	MR25P26M6-36.0
M83513/03-D 05	MR25P25C4-0.5
M83513/03-D 06	MR25P25C4-1.0
M83513/03-D 07	MR25P25C3-0.5
M83513/03-D 08	MR25P25C3-1.0
M83513/03-E 01	MR31P26M1-18.0
M83513/03-E 02	MR31P26M1-36.0
M83513/03-E 03	MR31P26M6-18.0
M83513/03-E 04	MR31P26M6-36.0
M83513/03-E 05	MR31P26C4-0.5
M83513/03-E 06	MR31P26C4-1.0
M83513/03-E 07	MR31P26C3-0.5
M83513/03-E 08	MR31P26C3-1.0
M83513/03-F 01	MR37P26M1-18.0
M83513/03-F 02	MR37P26M1-36.0
M83513/03-F 03	MR37P26M6-18.0
M83513/03-F 04	MR37P26M6-36.0
M83513/03-F 05	MR37P25C4-0.5
M83513/03-F 06	MR37P25C4-1.0
M83513/03-F 07	MR37P25C3-0.5
M83513/03-F 08	MR37P25C3-1.0
M83513/03-G 01	MR51-3P26M1-18.0
M83513/03-G 02	MR51-3P26M1-36.0
M83513/03-G 03	MR51-3P26M6-18.0
M83513/03-G 04	MR51-3P26M6-36.0
M83513/03-G 05	MR51-3P26C4-0.5
M83513/03-G 06	MR51-3P26C4-1.0
M83513/03-G 07	MR51-3P26C3-0.5
M83513/03-G 08	MR51-3P26C3-1.0
M83513/03-H 01	MR100P26M1-18.0
M83513/03-H 02	MR100P26M1-36.0
M83513/03-H 03	MR100P26M6-18.0
M83513/03-H 04	MR100P26M6-36.0
M83513/03-H 05	MR100P26C4-0.5
M83513/03-H 06	MR100P26C4-1.0
M83513/03-H 07	MR100P26C3-0.5
M83513/03-H 08	MR100P26C3-1.0
M83513/04-A 01	MR9S26M1-18.0
M83513/04-A 02	MR9S26M1-36.0
M83513/04-A 03	MR9S26M6-18.0
M83513/04-A 04	MR9S26M6-36.0
M83513/04-A 05	MR9S25C4-0.5
M83513/04-A 06	MR9S25C4-1.0
M83513/04-A 07	MR9S25C3-0.5
M83513/04-A 08	MR9S25C3-1.0
M83513/04-B 01	MR15S26M1-18.0
M83513/04-B 02	MR15S26M1-36.0
M83513/04-B 03	MR15S26M6-18.0
M83513/04-B 04	MR15S26M6-36.0
M83513/04-B 05	MR15S25C4-0.5
M83513/04-B 06	MR15S25C4-1.0
M83513/04-B 07	MR15S25CE-0.5
M83513/04-B 08	MR15S25C3-1.0
M83513/04-C 01	MR15S26M1-18.0
M83513/04-C 02	MR15S26M1-36.0
M83513/04-C 03	MR15S26M6-18.0
M83513/04-C 04	MR15S26M6-36.0
M83513/04-C 05	MR15S25C4-0.5
M83513/04-C 06	MR15S25C4-1.0
M83513/04-C 07	MR15S25C3-0.5
M83513/04-C 08	MR15S25C3-1.0
M83513/04-D 01	MR15S26M1-18.0
M83513/04-D 02	MR15S26M1-36.0
M83513/04-D 03	MR15S26M6-18.0
M83513/04-D 04	MR15S26M6-36.0
M83513/04-D 05	MR15S26C4-0.5
M83513/04-D 06	MR15S26C4-1.0
M83513/04-D 07	MR15S26C3-0.5
M83513/04-D 08	MR15S26C3-1.0
M83513/04-E 01	MR31S26M1-18.0
M83513/04-E 02	MR31S26M1-36.0
M83513/04-E 03	MR31S26M6-18.0
M83513/04-E 04	MR31S26M6-36.0
M83513/04-E 05	MR31S25C4-0.5
M83513/04-E 06	MR31S25C4-1.0
M83513/04-E 07	MR31S25C3-0.5
M83513/04-E 08	MR31S25C3-1.0
M83513/04-F 01	MR37S26M1-18.0
M83513/04-F 02	MR37S26M1-36.0
M83513/04-F 03	MR37S26M6-18.0
M83513/04-F 04	MR37S26M6-36.0
M83513/04-F 05	MR37S25C4-0.5
M83513/04-F 06	MR37S25C4-1.0
M83513/04-F 07	MR37S25C3-0.5
M83513/04-F 08	MR37S25C3-1.0
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M83513/04-G 03	MR513S26M6-18.0
M83513/04-G 04	MR513S26M6-36.0
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M83513/04-G 07	MR513S25C3-0.5
M83513/04-G 08	MR513S25C3-1.0
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M83513/04-H 02	MR100S26M1-36.0
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M83513/04-H 04	MR100S26M6-36.0
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M83513/04-H 06	MR100S25C4-1.0
M83513/04-H 07	MR100S25C3-0.5
M83513/04-H 08	MR100S25C3-1.0
M83513/05-02	UMI83513/05-02
M83513/05-03	UMI83513/05-03
M83513/05-05	UMI83513/05-05
M83513/05-06	UMI83513/05-06
M83513/05-07	UMI83513/05-07
M83513/05-12	UMI83513/05-12
M83513/05-13	UMI83513/05-13
M83513/05-15	UMI83513/05-15
M83513/05-16	UMI83513/05-16
M83513/05-17	UMI83513/05-17
M83513/06-A	PR9N
M83513/06-B	PR15N
M83513/06-C	PR21N
M83513/06-D	PR25N
M83513/06-E	PR31N
M83513/06-F	PR37N
M83513/06-G	PR51-3N
M83513/07-A	PR9T
M83513/07-B	PR15T
M83513/07-C	PR21T
M83513/07-D	PR25T

.050" 1,27 mm Center Rectangular Connectors

Ulti Mate Inc.
Orange, CA
714-937-9388

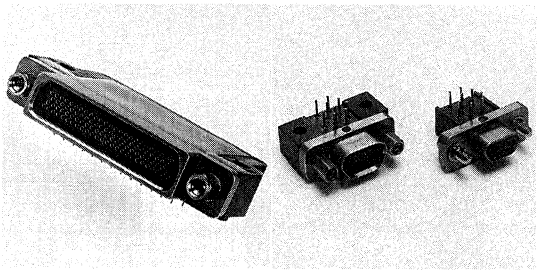
Solder Cup, wired and PCB connectors
Cross Reference / MIL-C-83513 to Ulti Mate Part Number

Government Designation	Ulti Mate Part Number
M83513/07-E	PR31T
M83513/07-F	PR37T
M83513/07-G	PR51-3T
M83513/08-A 01	PR9P26M1-18.0
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M83513/08-A 03	PR9P26M6-18.0
M83513/08-A 04C	PR9P26M6-36.0
M83513/08-A 05	PR9P25C4-0.5
M83513/08-A 06	PR9P25C4-1.0
M83513/08-A 07	PR9P25C3-0.5
M83513/08-A 08	PR9P25C3-1.0
M83513/08-B 01	PR15P26M1-18.0
M83513/08-B 02	PR15P26M1-36.0
M83513/08-B 03	PR15P26M6-18.0
M83513/08-B 04	PR15P26M6-36.0
M83513/08-B 05	PR15P25C4-0.5
M83513/08-B 06	PR15P25C4-1.0
M83513/08-B 07	PR15P25C3-0.5
M83513/08-B 08	PR15P25C3-1.0
M83513/08-C 01	PR21P26M1-18.0
M83513/08-C 02	PR21P26M1-36.0
M83513/08-C 03	PR21P26M6-18.0
M83513/08-C 04	PR21P26M6-36.0
M83513/08-C 05	PR21P25C4-0.5
M83513/08-C 06	PR21P25C4-1.0
M83513/08-C 07	PR21P25C3-0.5
M83513/08-C 08	PR21P25C3-1.0
M83513/08-D 01	PR25P26M1-18.0
M83513/08-D 02	PR25P26M1-36.0
M83513/08-D 03	PR25P26M6-18.0
M83513/08-D 04	PR25P26M6-36.0
M83513/08-D 05	PR25P25C4-0.5
M83513/08-D 06	PR25P25C4-1.0
M83513/08-D 07	PR25P25C3-0.5
M83513/08-D 08	PR25P25C3-1.0
M83513/08-E 01	PR31P26M1-18.0
M83513/08-E 02	PR31P26M1-36.0
M83513/08-E 03	PR31P26M6-18.0
M83513/08-E 04	PR31P26M6-36.0
M83513/08-E 05	PR31P25C4-0.5
M83513/08-E 06	PR31P25C4-1.0
M83513/08-E 07	PR31P25C3-0.5
M83513/08-E 08	PR31P25C3-1.0
M83513/08-F 01	PR37P26M1-18.0
M83513/08-F 02	PR37P26M1-36.0
M83513/08-F 03	PR37P26M6-18.0
M83513/08-F 04	PR37P26M6-36.0
M83513/08-F 05	PR37P25C4-0.5
M83513/08-F 06	PR37P25C4-1.0
M83513/08-F 07	PR37P25C3-0.5
M83513/08-F 08	PR37P25C3-1.0
M83513/08-G 01	PR51-3P26M1-18.0
M83513/08-G 02	PR51-3P26M1-36.0
M83513/08-G 03	PR51-3P26M6-18.0
M83513/08-G 04	PR51-3P26M6-36.0
M83513/08-G 05	PR51-3P25C4-0.5
M83513/08-G 06	PR51-3P25C4-1.0
M83513/08-G 07	PR51-3P25C3-0.5
M83513/08-G 08	PR51-3P25C3-1.0
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M83513/09-A 02	PR9S26M1-36.0
M83513/09-A 03	PR9S26M6-18.0
M83513/09-A 04	PR9S26M6-36.0
M83513/09-A 05	PR9S25C4-0.5
M83513/09-A 06	PR9S25C4-1.0
M83513/09-A 07	PR9S25C3-0.5
M83513/09-A 08	PR9S25C3-1.0
M83513/09-B 01	PR15S26M1-18.0
M83513/09-B 02	PR15S26M1-36.0
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M83513/09-B 06	PR15S25C4-1.0
M83513/09-B 07	PR15S25C3-0.5
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M83513/09-C 01	PR21S26M1-18.0
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M83513/09-D 06	PR25S25C4-1.0
M83513/09-D 07	PR25S25C3-0.5
M83513/09-D 08	PR25S25C3-1.0
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M83513/09-E 02	PR31S26M1-36.0
M83513/09-E 03	PR31S26M6-18.0
M83513/09-E 04	PR31S26M6-36.0
M83513/09-E 05	PR31S25C4-0.5
M83513/09-E 06	PR31S25C4-1.0
M83513/09-E 07	PR31S25C3-0.5
M83513/09-E 08	PR31S25C3-1.0
M83513/09-F 01	PR37S26M1-18.0
M83513/09-F 02	PR37S26M1-36.0
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M83513/09-G 02	PR51-3S26M1-36.0
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M83513/09-G 04	PR51-3S26M6-36.0
M83513/09-G 05	PR51-3S25C4-0.5
M83513/09-G 06	PR51-3S25C4-1.0
M83513/09-G 07	PR51-3S25C3-0.5
M83513/09-G 08	PR51-3S25C3-1.0
M83513/10A01CP	CM1R09P07
M83513/10B01CP	CM1R15P07
M83513/10C01CP	CM1R21P07
M83513/10D01CP	CM1R25P07
M83513/10E01CP	CM1R31P07
M83513/10F01CP	CM1R37P07
M83513/11G01CP	CM1R51P07
M83513/12H01CP	CM1R100P17
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M83513/13F01CP	CM1R37S07
M83513/14G01CP	CM1R51S07
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M83513/19E01CP	CM5R31S07
M83513/19F01CP	CM5R37S07
M83513/20G01CP	CM5R51S07
M83513/21H01CP	CM5R100S17
M83513/22A01CP	CM4R09P07
M83513/22B01CP	CM4R15P07
M83513/22C01CP	CM4R21P07
M83513/22D01CP	CM4R25P07
M83513/22E01CP	CM4R31P07
M83513/22F01CP	CM4R37P07
M83513/23G01CP	CM4R51P07
M83513/24H01CP	CM4R100P17
M83513/25A01CP	CM4R09S07
M83513/25B01CP	CM4R15S07
M83513/25C01CP	CM4R21S07
M83513/25D01CP	CM4R25S07
M83513/25E01CP	CM4R31S07
M83513/25F01CP	CM4R37S07
M83513/26G01CP	CM4R51S07
M83513/27H01CP	CM4R100S17

.050" 1,27 mm Center Rectangular PCB Connectors

Ulti Mate Inc.
Orange, CA
714-937-9388

Ulti Mate offers the widest variety of thru-hole solder connectors, of which seven styles are currently cataloged. All have mating interfaces per Mil-C-83513 and 24 AWG .020" .051mm diameter exit leads.



Interface Series

The Style 6 and 16 are available in the Mil Spec. "M" and the intermateable plastic "B" series. The other styles are available in the "M" and "B" and also the narrower Mil Spec. plastic "P" series and its' intermateable metal shell "A" series. Styles 1, 4, and 5 are qualified to MIL-C-83513.

C M 8 R 37 P 07 T

Circuit Series "C"

Interface Connector Series
A, P, M, B

Style
1 = Right angle mount (CBR)
4 = Vertical mount (BS)
5 = Right angle mount (BR)
6 = Vertical mount (ST)
11 = Right angle mount, alternate to style 1
8 = Right angle mount (RT)
16 = Vertical mount (STS)
18 = Right angle mount (RTS)

Insulator Material
R = Ryton, PPS, MIL-M-24519 GTS 40F

Size
Number of contacts: 9, 15, 21, 25, 31, 37, 51-3, 100
Qualified to MIL-C-83513

T = Threaded Insert

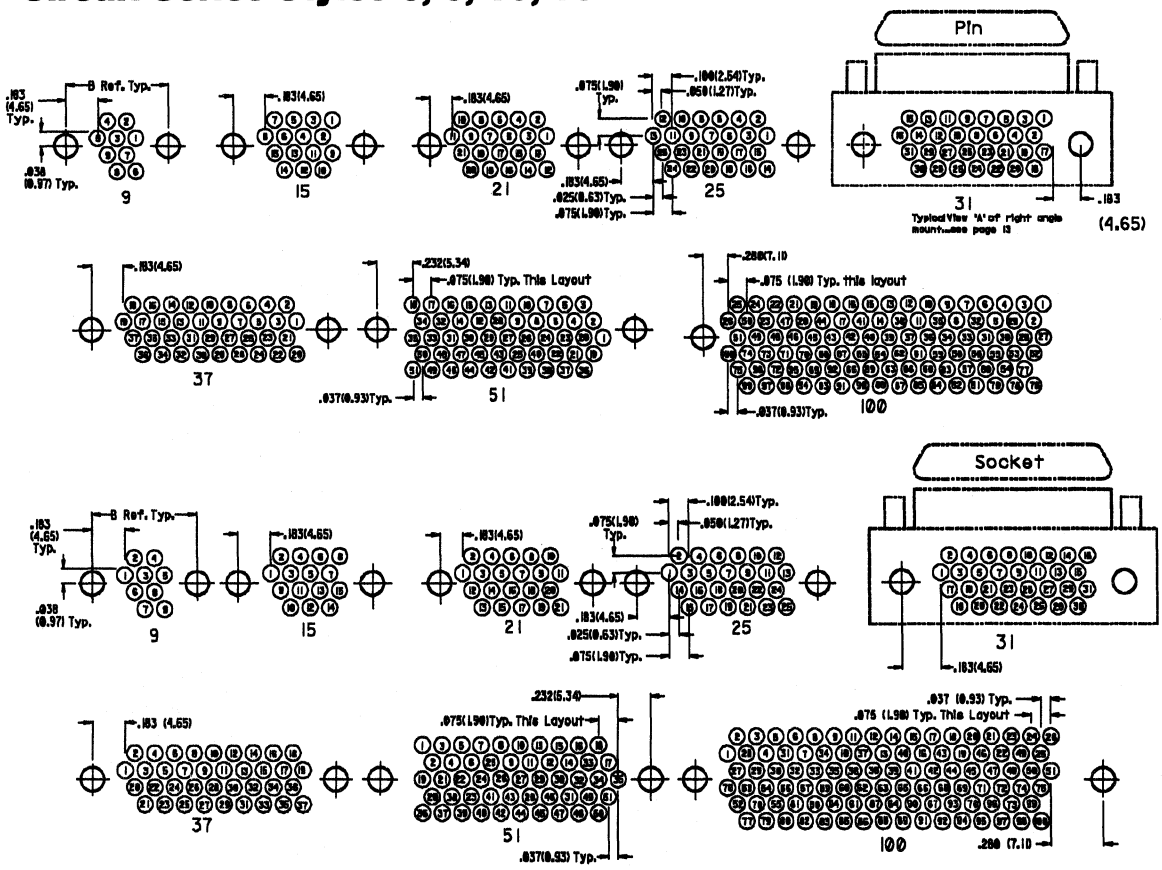
Mounting / Coupling Hardware
0 = None
07 = jackpost
Note: See page 7Q for details, jackscrews
02, 03, 05 & 06 are available only on styles 16 & 18.

Contact Type
P = Pin
S = Socket

Modification Codes
The standard modification codes listed on page 6Q are appropriate for use on circuit connectors.
The standard termination length is .109" 2.77mm. Consult factory for special lengths.

Circuit Series Styles 6, 8, 16, 18

Orientation for Style 8 and 18.



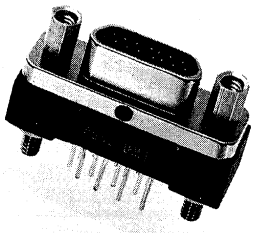
.050" 1,27 mm Center Rectangular PCB Connectors

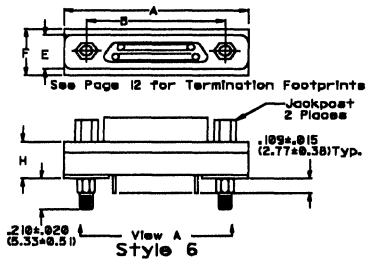
Ulti Mate Inc.
Orange, CA
714-937-9388

Circuit Series
Vertical Styles 6 & 16

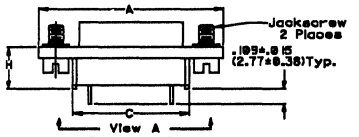
Style 6 is a vertical mount unit having jackposts.
Style 16 is a vertical mount unit having jackscrews.
Recommended for new designs over Style 4.
Advantage: Termination footprints are contained within the envelope of the connector body for space savings.
Footprint spacing is .075" x .100" on 2 row 9 - 37 layouts, and .075" x .075" on the size 51 and 100 layouts.

Size	Dim A Max.	Dim B Max.	Dim C Max.	Dim E Max.	Dim F Max.	Dim H Max.
9	.785 19.94	.565 14.35	.400 10.16	.308 7.82	.310 7.87	.330 8.38
15	.935 23.75	.715 18.16	.550 13.97	.308 7.82	.310 7.87	.330 8.38
21	1.085 27.56	.865 21.97	.700 17.78	.308 7.82	.310 7.87	.330 8.38
25	1.185 30.10	.965 24.51	.800 20.32	.308 7.82	.310 7.87	.330 8.38
31	1.335 33.91	1.115 28.32	.950 24.13	.308 7.82	.310 7.87	.330 8.38
37	1.485 37.72	1.265 32.13	1.100 27.94	.308 7.82	.310 7.87	.330 8.38
51	1.435 36.45	1.215 30.86	1.045 26.54	.351 8.92	.400 10.16	.345 8.76
100	2.170 55.12	1.800 45.72	1.550 39.37	.394 10.01	.510 12.95	.400 10.16





Style 6



Style 16

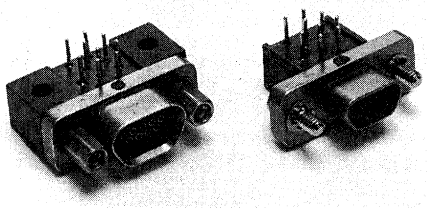
Circuit Series
Right Angle Styles 8 & 18

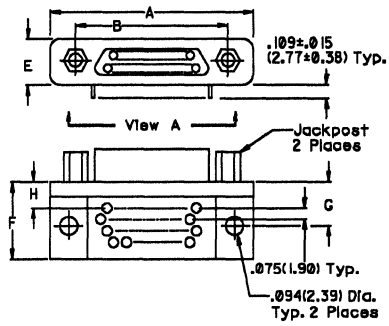
Style 8 is a right angle mount unit having jackposts.
Style 18 is a right angle mount unit having jackscrews.
Recommended for new designs over Styles 1 & 5.
Advantage: Termination footprints are contained within the envelope of the connector body for space savings.
Footprint spacing is .075" x .100" on 2 row 9 - 37 layouts, and .075" x .075" on the size 51 and 100 layouts.

Size	Dim A Max	Dim B Max	Dim C Max	Dim E Max (P & A)
9	.785 19.94	.565 14.35	.400 10.16	.218 5.34
15	.935 23.75	.715 18.16	.550 13.97	.218 5.34
21	1.085 27.56	.865 21.97	.700 17.78	.218 5.34
25	1.185 30.10	.965 24.51	.800 20.32	.218 5.34
31	1.335 33.91	1.115 28.32	.950 24.13	.218 5.34
37	1.485 37.72	1.265 32.13	1.100 27.94	.218 5.34
51	1.435 36.45	1.215 30.86	1.045 26.54	.260 6.60
100	2.170 55.12	1.800 45.72	1.550 39.37	--------

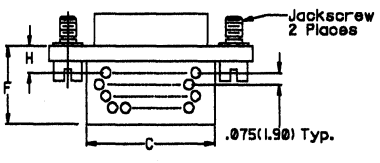
Size	Dim E Max (M & B)	Dim F Max	Dim G Max	Dim H Max
9	.308 7.82	.410 10.41	.250 6.35	.138 3.50
15	.308 7.82	.410 10.41	.250 6.35	.138 3.50
21	.308 7.82	.410 10.41	.250 6.35	.138 3.50
25	.308 7.82	.410 10.41	.250 6.35	.138 3.50
31	.308 7.82	.410 10.41	.250 6.35	.138 3.50
37	.308 7.82	.410 10.41	.250 6.35	.138 3.50
51	.351 8.92	.500 12.70	.295 7.49	.145 3.68
100	.394 10.01	.615 15.62	.350 8.89	.163 4.14

Refer to Page 12Q for ordering information.





Style 8



Style 18

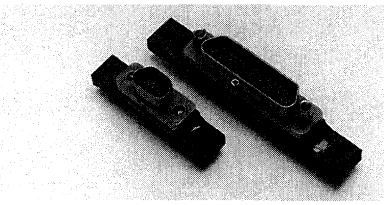
Micro/Nano Miniature Connectors
.050 Rectangular PCB Connectors

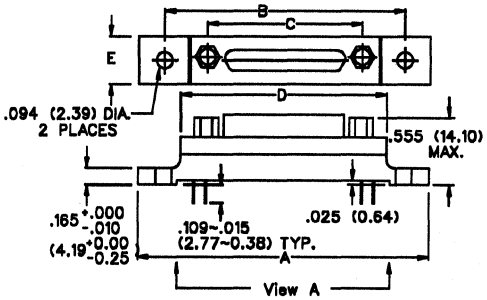
Ulti Mate Inc.
Orange, CA
714-937-9388

Circuit Series
Vertical Style 4

per MIL-C-83513 / 22 thru 27

UMI Style 4 (BS) is a vertical mount PC Board connector having exit leads on a .100" 2,54 mm x .100" 2,54 mm grid. It has the same number of rows as the mating face ie; 9 thru 37 has 2 rows, the 51 has 3 and the 100 has 4 rows. Mounting ears and jackposts for coupling are provided. For new applications, consider style 6 which has a denser footprint of .075" 1,90mm



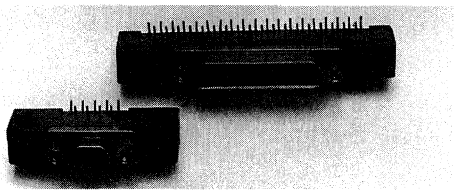


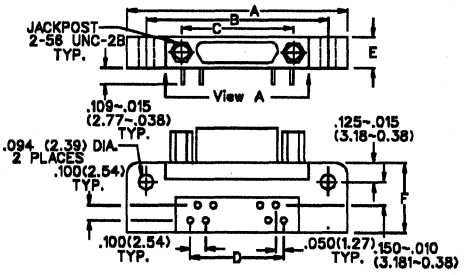
Size	Dim A Max.	Dim B	Dim C Max.	Dim D Ref	Dim E Max. (M & B)	Dim E Max. (P & A)
9	1.390 35.31	1.150 29.21	0.565 14.35	0.785 19.94	0.308 7.82	0.218 5.54
15	1.390 35.31	1.150 29.21	0.715 18.16	0.935 23.75	0.308 7.82	0.218 5.54
21	1.690 42.93	1.450 36.83	0.865 21.97	1.085 27.56	0.308 7.82	0.218 5.54
25	1.740 44.20	1.500 38.10	0.965 24.51	1.185 30.10	0.308 7.82	0.218 5.54
31	2.040 51.82	1.800 45.72	1.115 28.32	1.335 33.91	0.308 7.82	0.218 5.54
37	2.340 59.44	2.100 53.34	1.265 32.13	1.485 37.72	0.308 7.82	0.218 5.54
51	2.270 57.66	2.000 50.80	1.215 30.86	1.435 36.45	0.351 8.92	0.260 6.60
100	3.070 77.98	2.800 71.12	1.800 45.72	2.175 55.25	0.394 10.01	0.000

Circuit Series
Right Angle Style 5

per MIL-C-83513 / 16 thru 21

UMI Style 5 (BR) is a right angle mount connector. Exit leads are on a .100" 2,54 mm x .100" 2,54mm grid with the same footprint as Style 4. Mounting thru-holes and jackposts for coupling are provided. For new applications, consider Style 8 which has a denser foot print of .075" 1,90mm.



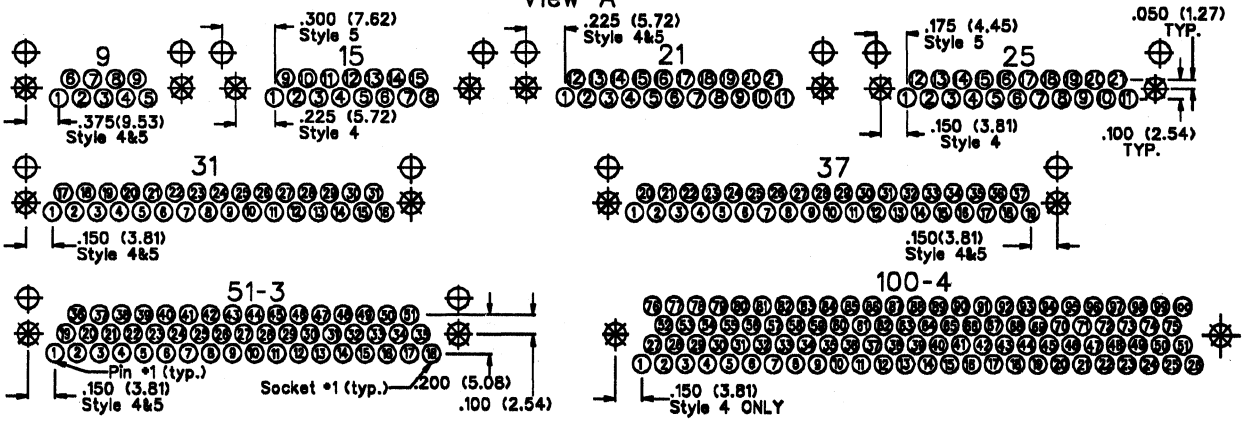


Size	Dim A	Dim B	Dim C	Dim D	Dim E Max. (M & B)	Dim E Max. (P & A)	Dim F
9	1.390 35.31	1.150 29.21	.565 14.35	.400 10.16	.308 7.82	.218 5.54	.455 11.56
15	1.540 39.12	1.300 33.02	.715 18.16	.700 17.78	.308 7.82	.218 5.54	.455 11.56
21	1.690 42.93	1.450 36.83	.865 21.97	1.000 25.40	.308 7.82	.218 5.54	.455 11.56
25	1.790 45.47	1.550 39.37	.965 24.51	1.200 30.48	.308 7.82	.218 5.54	.455 11.56
31	2.040 51.82	1.800 45.72	1.115 28.32	1.500 38.10	.308 7.82	.218 5.54	.455 11.56
37	2.340 59.44	2.100 53.34	1.265 32.13	1.800 45.72	.308 7.82	.218 5.54	.455 11.56
51	1.875 47.62	1.600 40.64	1.215 30.86	1.700 43.18	.351 8.92	.260 6.60	.565 14.35

⊕- Style 5
⊕- Style 4

Termination Footprints for Style 4&5
Views Shown Are Pin Side. Sockets Are Mirror Image

View A



Refer to Page 12Q for ordering information

Q

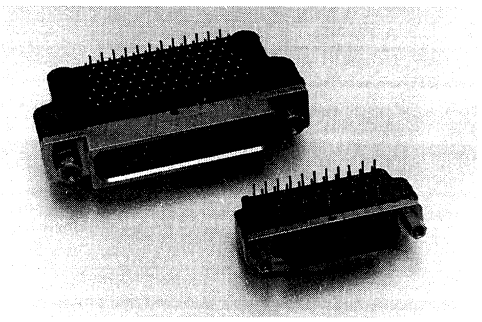
.050" 1,27 mm Center Rectangular PCB Connectors

Ulti Mate Inc.
Orange, CA
714-937-9388

Circuit Series Styles 1 & 11

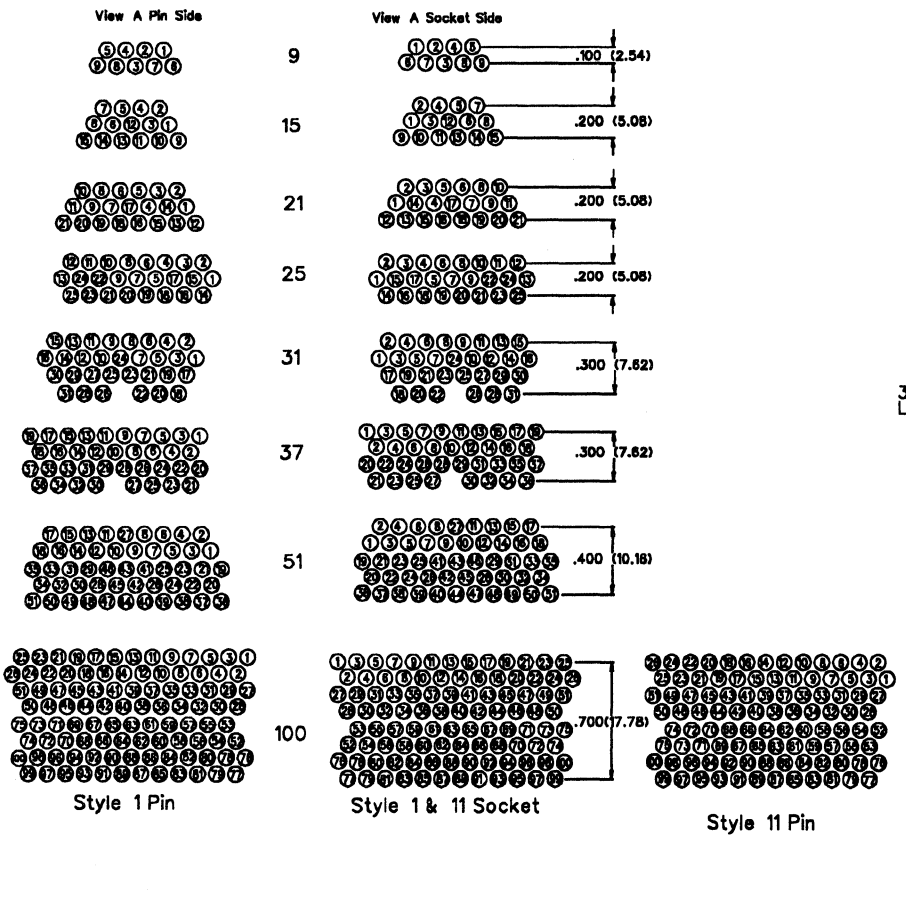
Right Angle

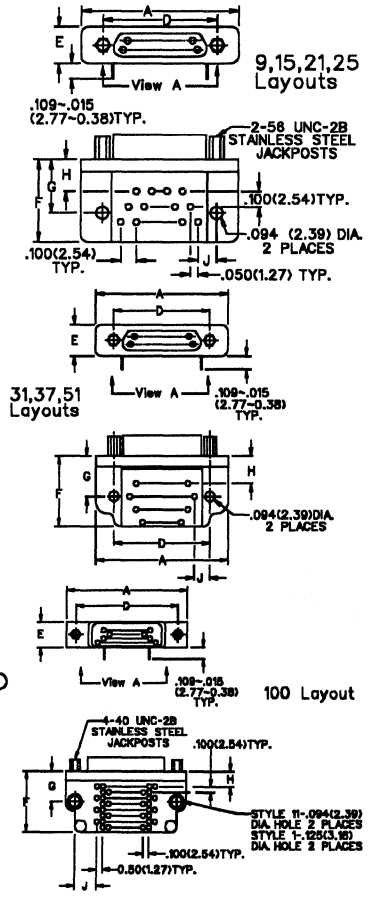
Style 1 is qualified to Mil-C-83513. / 10 thru 15



Style 1 (CBR) is the original right angle mount pc board connector having 90 termination exit leads on a .100" 2,54mm x .100" 2,54mm grid. Mounting thru-holes are provided. Jackposts are optional. Jackposts to receive jackscrews are optional. Style 11 is an industry alternative for Style 1. It is identical except for the setback of the footprints from the metal shell. All dimensions are the same except F, G, & H. For new applications we suggest you consider style 8, or 18. Style 11 is an industry alternate to Style 1 but not qualified to Mil-C-83513.

Style 1 & 11 Dimensions									Style 11 Dimensions		
Size	Dim A	Dim D	Dim E Max (P & A)	Dim E Max (M & B)	Dim F	Dim G	Dim H	Dim J	Dim F	Dim G	Dim H
9	0.785 19.94	0.565 14.35	0.218 5.54	0.308 7.82	0.420 10.67	0.250 6.35	0.230 5.84	0.083 2.11	0.400 10.16	0.230 5.33	0.210 5.33
15	0.935 23.75	0.865 21.97	0.218 5.54	0.308 7.82	0.420 10.67	0.250 6.35	0.130 3.30	0.083 2.11	0.480 12.19	0.330 5.33	0.210 5.33
25	1.185 30.10	0.965 24.51	0.218 5.54	0.308 7.82	0.420 10.67	0.250 6.35	0.130 3.30	0.083 2.11	0.480 12.19	0.330 5.33	0.210 5.33
31	1.335 33.91	1.265 28.32	0.218 5.54	0.308 7.82	0.520 13.21	0.250 6.35	0.130 3.30	0.183 4.65	0.600 15.24	0.330 5.33	0.210 5.33
51	1.435 36.45	1.215 30.86	0.260 6.60	0.351 8.92	0.650 16.51	0.300 7.62	0.150 3.81	0.108 2.74	0.710 18.03	0.360 5.33	0.210 5.33
100	2.165 54.99	1.800 45.72	--- ---	0.394 10.01	1.000 25.40	0.400 10.16	0.200 5.08	0.275 6.99	1.010 25.65	0.420 5.33	0.210 5.33





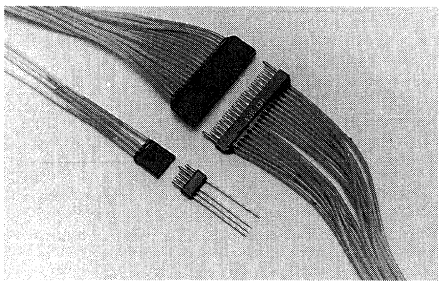
Refer to page 12Q for ordering information.

.050" 1,27 mm Center Single Row Strip Connectors

Ulti Mate Inc.
Orange, CA
714-937-9388

"S" Series Strip Connectors / 50 mil

The plastic molded body of the 50 Mil Strip is made to accommodate up to 120 micro contacts, however, you select the number of contacts you need from 1 to 120. There are many options to choose from: guide pins, jackscrews, mounting holes, six circuit termination styles, as well as insulated wire terminations and metal shells.



Ordering Information

S R 25 P 2 -26 E 5- 18.0
or
LO1

Series Designation
S = Strip
SS = Metal sides
SM = Complete Metal shell
S1 = .100" 2.54mm contact centers

Insulator Material
R = Ryton P.P.S. MIL-C-24519 GTS-04F *

Size
Number of Contacts up to 120

Contact Type
P=Pin, Crimp N=Pin, Solder Cup *
S=Socket, Crimp T=Socket, Solder Cup *

Hardware (Combine as required)
0 = None
1 = One guide pin (socket side), One hole (pin side)
2 = Two guide pins (socket side), Two holes (pin side)
3 = One center jackscrew (socket side), One threaded hole (pin side)
4 = Mounting holes at each end
5 = Jackscrews at each end

* indicates preferred standard

Wire Length (3 digits)
3 Digits 18.0" or M46 (cm)

Wire Color / Finish
1 = All White
2 = All Yellow
3 = Tin Plated Solid Wire
4 = Gold Plated Solid Wire
5 = Color Coded per MIL-STD-681C

Wire Type
B = PVC
C = Solid Copper per QQ-W-343
E = Type "E" Teflon per MIL-W-16878/4
F = Type "ET" Teflon per MIL-W-16878/6
G = Ribbon Cable per MIL-C-49055
J = Type "E" 19 Strand
K = Type "ET" 19 Strand
M = Teflon per MIL-W-22759/11
S = Teflon Insulated Solid Copper

Wire Size
24, 26,* 28, 30 AWG

Circuit Termination
(Replaces all of the above)
-LO1, -LO2, -LO3, -LO4, -LO5, -LO6

Q

.050" 1,27 mm Center Single Row Strip Connectors

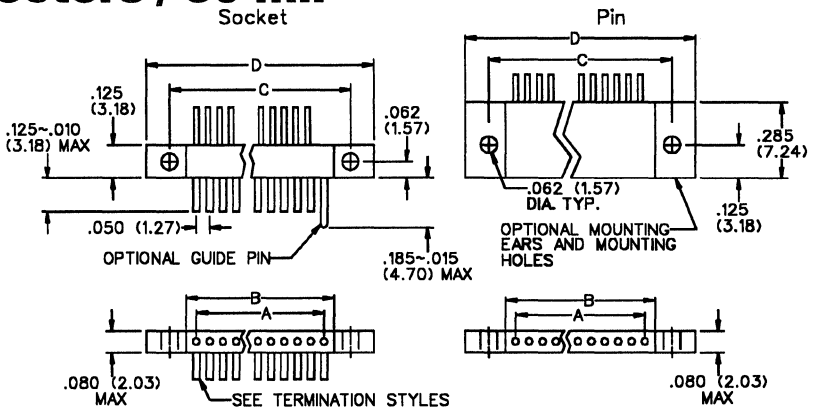
Ulti Mate Inc.
Orange, CA
714-937-9388

"S" Series Strip Connectors / 50 mil

S

Basic Strip
Dimensional Formula

A = (No. of Positions minus 1) x.050" 1.27mm 1st to last contact.
B = A+.075" 1.90mm - Overall without ears
C = A+.200" 5.08mm - Center to center of mounting holes.
D = A+.375" 9.52mm - Overall with ears.



Ordering Notes

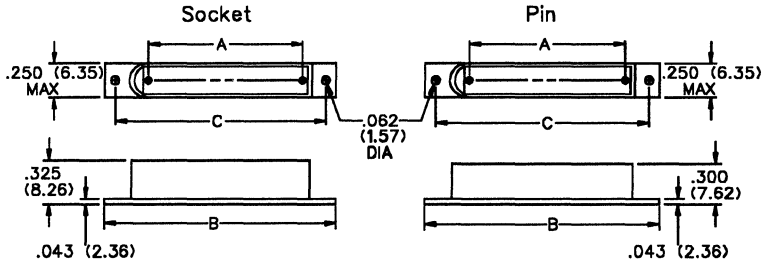
Each guide pin will replace a contact cavity thereby increasing the overall length. The overall length will also increase for one or two cross mounting holes or for jackscrews. Use 3 positions for each cross mounting hole or jackscrew.

S1 Strip Connectors with contacts on .100 2.54 Centers.

SM

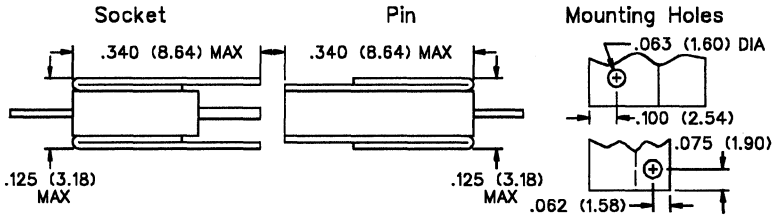
Complete Metal Shells with Mounting Ears
Dimensional Formula

A = (No. of positions minus 1) x .050" 1.27mm
B = A+.520" 1.32mm = Overall
C = A+.365" 9.27.. - Center to center of mounting holes.



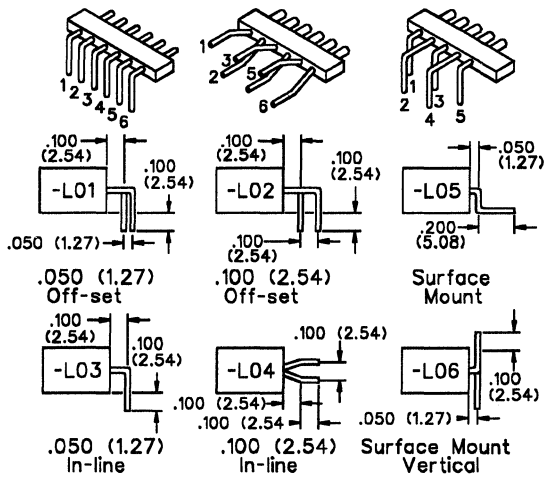
SS

Metal side added for shielding and strength.
Note: Insulators are basic strips.



Optional Circuit Terminations

Note: All Dimensions are Max.



Refer to Page 16Q for ordering information

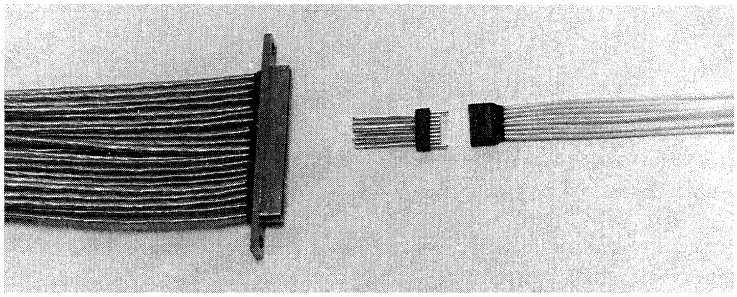
Q

.025" 0,66 mm Center Nano Connectors

Ulti Mate Inc.
Orange, CA
714-937-9388

"N" Series Nano Connectors / 25 mil

A truly remarkable series of connectors with contacts on .025" centers. This means that you could have contact densities of 1600 per square inch. The size 30 Mite-Y-Pin contacts have engagement forces of only 1 oz. and operate effectively under shock and vibration requirements as established for MIL-C-83513. The Nano Series is currently available in strip form with single row contacts up to 40 positions, metal shell strips for added strength and shielding, and is a hermaphroditic connector with two rows, 80 positions. Inquiries for other configurations are invited.



Ordering Information

NS R 25 P 2 -26 E 5- 18.0
or
LO1

Series Designation
NS = Nano Strip
NSM = Complete Metal shell
NH = Hermaphroditic

Insulator Material
R = Ryton P.P.S. MIL-C-24519 GTS-04F*

Size
Number of Contacts. 40 positions max. for NS & NSM
80 positions max. for NH

Contact Type
P = Pin, Crimp
S = Socket, Crimp
H = P & S (NH Series only)

Hardware (Combine as required)
0 = None
1 = One guide pin (socket side), One hole (pin side)
2 = Two guide pins (socket side), Two holes (pin side)

Wire Length (3 digits)
3 Digits 18.0" or M46 (cm)

Wire Color / Finish
1 = White*
2 = Yellow
3 = Tin Plated
4 = Gold Plated
5 = Color Coded per MIL-STD-681C

Wire Type
B = PVC 7 strand B
C = Solid Copper
E = TFE 7 strand E*
F = TFE 7 strand ET

Wire Size
30, 32*, 34, 36 AWG

Circuit Termination
(Replaces all of the above)
-LO1, -LO2, -LO3, -LO4, -LO5, -LO6
(Not available on NH Series)

*Indicates preferred standard.

Q

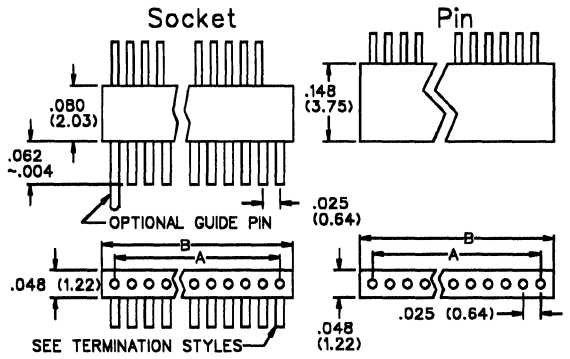
.025" 0,66 mm Center Nano Connectors

Ulti Mate Inc.
Orange, CA
714-937-9388

"N" Series

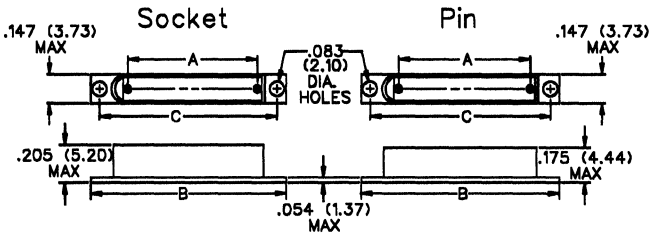
NS
Basic Nano Strip
Dimensional Formula

A = (No. of positions minus 1) x .025" 0.63mm
1st to last contact.
B = A+ .050" 1.27mm - Overall



NSM
Complete metal Shell with Mounting Ears
Dimensional Formula

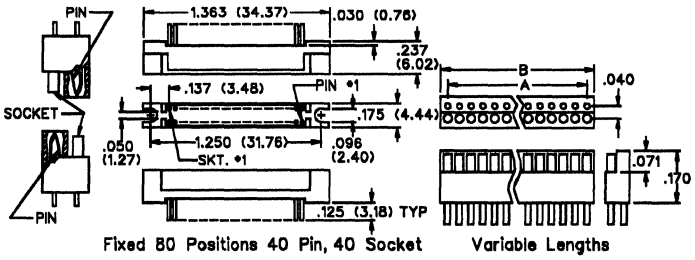
A = (No. of positions minus 1) x .025" 0.63mm
1st to last contact.
B = A+ .520 1.32mm - Overall
C = A+ .365 9.27mm - Center to center of mtg holes



NH
Hermaphroditic

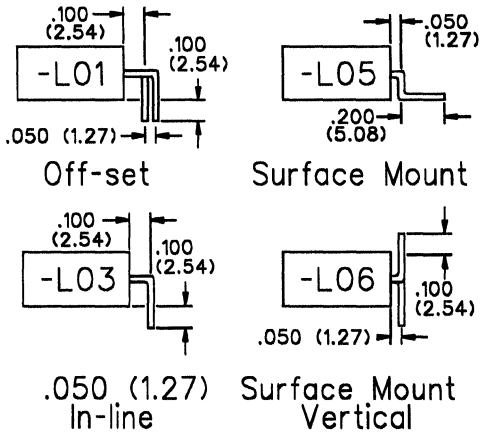
Two rows, one of pins and one of sockets, side by side to form a hermaphroditic insulator. The major advantage is much increased insulator strength while achieving maximum high density.

Dimensional Formula / Variable Lengths
A =(No. of positions minus 1) x .025" 0.63mm
First to last circuit.
B =A + .050" 1.27mm = Overall



Optional Circuit Terminations

Socket terminations are self-leaded
(one piece) .014" 0.36mm diameter.
Pin terminations are solid 30 AWG. .010" 0.25mm diameter.
Both are solid or tin dip.



Refer to Page 18Q for ordering information.

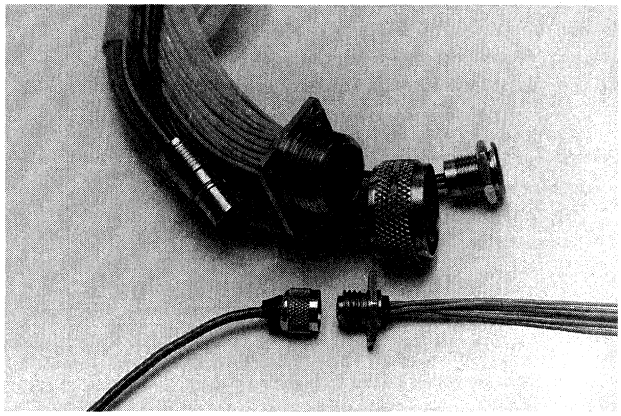
Q

.050" 1,27 mm Center Circular Connectors

Ulti Mate Inc.
Orange, CA
714-937-9388

RT & RQ Series / 50 mil Circular Connectors

Ulti Mate offers a broad line of circular connectors, including size 1, with 7 micro contacts, size 2 with 19 micro contacts, size 3 with 37 micro contacts, size 4 with 55 micro contacts, and the size 5 with 85 micro contacts. Size 1,2, and 3 layouts are available in the "Quick Disconnect" (push/pull) "RQ" Series. Sizes 1, 4 and 5 layouts are available in the threaded coupling "RT" Series connectors. All have precision machined metal shells. Environmental sealing is available. This family provides all the advantages of circular connectors; ease of coupling, round cable bundle form, ease of panel mounting and space efficiency.



Ordering Information

R Q P 0 B 1- 7 S

Circular Series

Connector Type
Q = Quick Disconnect
T = Threaded
L = Lanyard

Shell Style
P = Plug
R = Receptacle

Mounting Style
0 = Plug
1 = Front
2 = Rear
3 = Wall

Contact Type
P = Pin
S = Socket
N = Pin Solder Cup
T = Socket Solder Cup

Wire Color / Finish
7, 19, 37, 55, 85

Shell Size
1 = 7 or 19
2 = 19
3 = 37
4 = 55
5 = 85

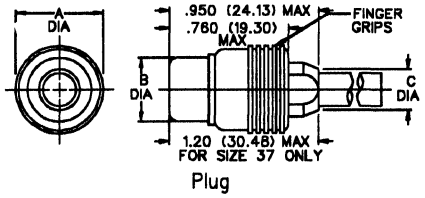
Material
B = Brass
S = Stainless Steel

Q

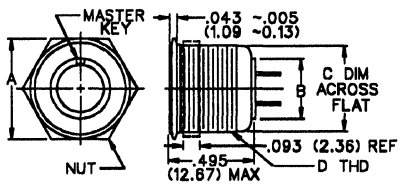
.050" 1,27 mm Center Circular Connectors

Ulti Mate Inc.
Orange, CA
714-937-9388

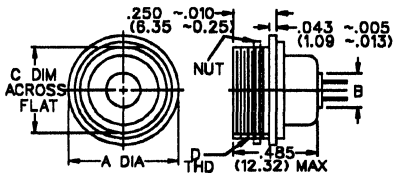
RT & RQ Series / 50 mil Circular Connectors



Plug



Receptacle / Front Panel Mt.



Receptacle / Back Panel Mt.

Shell Size	Dim A Max.	Dim B Max.	Dim C Max.	No. of Contacts
1	.385 9.79	.305 7.75	.180 4.57	7 or 19
2	.515 13.08	.405 10.29	.260 6.60	19
3	.760 19.30	.635 16.13	.350 8.89	37

Shell Size	Dim A Max.	Dim B Max.	Dim C Max.	D Thread
1	.510 12.89	.245 6.22	.359 9.12	3/8-32UNEF-2A
2	.575 14.60	.345 8.76	.470 11.94	1/2-28UNEF-2A
3	.855 21.72	.520 13.21	.740 18.80	3/4-20UNEF-2A

Shell Size	Dim A Max.	Dim B Max.	Dim C Max.	D Thread
1	.570 14.48	.245 6.22	.420 10.67	7/16-28UNEF-2A
2	.635 16.13	.345 8.76	.530 13.46	9/16-24UNEF-2A
3	.915 23.24	.520 13.21	.725 18.42	3/4 -20UNEF-2A

Dimensions: Inches / mm

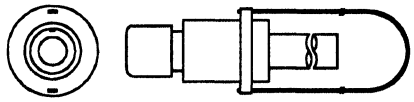
Panel Cut-outs

Front panel mount

Shell Size	Dim A +/- .005 0.13	Dim B Dia
1	.364 9.25	.390 9.91
2	.475 12.06	.515 13.08
3	.729 18.52	.755 19.18

Back panel mount

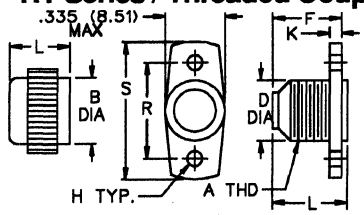
Shell Size	Dim A +/- .005 0.13	Dim B Dia
1	.425 10.80	.440 11.18
2	.535 13.59	.564 14.33
3	.729 18.52	.755 19.18



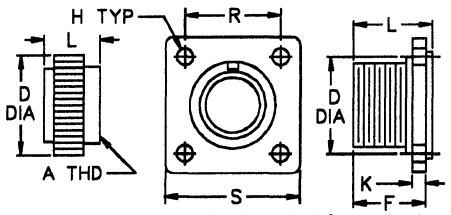
Lanyard / Quick Disconnect

Consult factory for detailed information

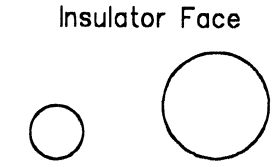
RT Series / Threaded Coupling



Plug Receptacle / Size 1



Plug Receptacle / Size 4 & 5



(Layouts Shown Below)

Shell Size	A Thread	Dim D Max.	Dim L Max.
1	5/16-24UNF-2B	.375 9.52	.315 8.00
4	5/8-24UNEF-2B	.755 19.18	.440 11.18
5	11/16-24UNEF-2B	.865 21.97	.465 11.81

Shell Size	A Thread	Dim D Max.	Dim F Max.	Dim H +/- .003 0.08	Dim K	Dim L Max.	Dim R +/- .005 0.13	Dim S Max.
1	5/16-24UNF-2A	.325 8.26	.320 8.13	.078 1.98	.062 1.57	.400 10.16	.460 11.68	.630 16.00
4	5/8-24UNEF-2A	.625 15.88	.440 11.18	.091 2.31	.062 1.57	.490 12.45	.580 14.73	.760 19.30
5	11/16-24UNEF-2A	.745 18.92	.440 11.18	.091 2.31	.062 1.57	.575 14.60	.674 17.12	.850 21.59

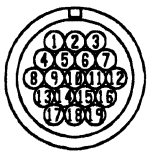
CONTACT ARRANGEMENTS

Face View / Pin Side

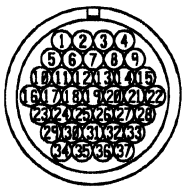
Enlarged for Clarity...



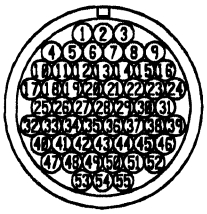
Size 1 or 2
7 Contacts



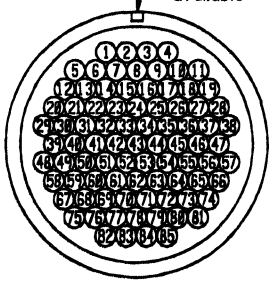
Size 1 or 2
19 Contacts



Size 3
37 Contacts



Size 4
55 contacts



Size 5
85 contacts

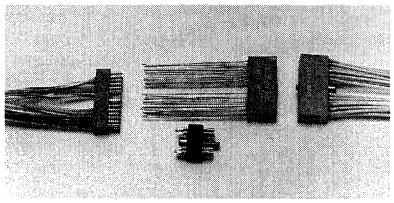
Q

.050" 1,27 mm Center Rectangular Connectors

Ulti Mate Inc.
Orange, CA
714-937-9388

JS Series Center Jackscrew Connectors

A Family of microminiature center jackscrew connectors, the JSB Series is currently available with layouts of 10, 11, 26 and 35 contacts. The shrouded JSS Series is designed with 16, 28 and 34 contacts. Both the JSB and the JSS Series have a full range of terminations including cable to cable, board to cable, board to board and other combinations.



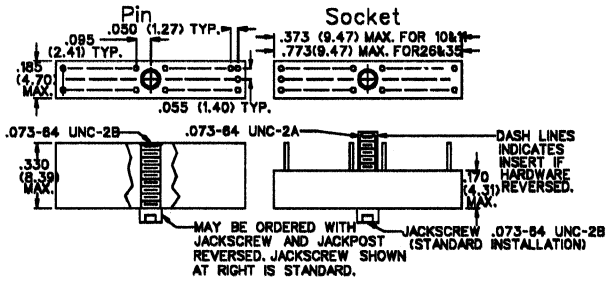
Ordering Information

JS B P -26 P -26 E 5 -18.0 S

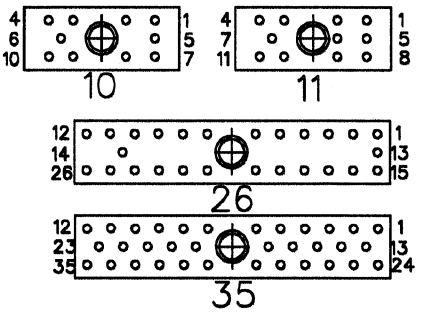
- **Series**
- **Configuration**
  - B = Unshrouded
  - S = Shrouded
- **Insulator Material**
  - P = Polyester
  - R = Ryton
- **Contact Arrangement**
  - 10, 11, 26 - 35 (JSB)
  - 16, 28, 34 (JSS)
- **Contact Type**
  - P = Pin Crimp
  - S = Socket Crimp
  - N = Pin Solder Cup
  - T = Socket Solder Cup
- **Coupling**
  - S = Standard
  - R = Reversed
- **Wire Length (3 digits)**
  - 18.0" or M46 (cm)
- **Wire Color**
  - Same as Page 5Q
- **Wire Type**
  - Same as Page 5Q
- **Wire Size**
  - Same as Page 5Q

JSB Series / Unshrouded

Dimensions Inches (mm)

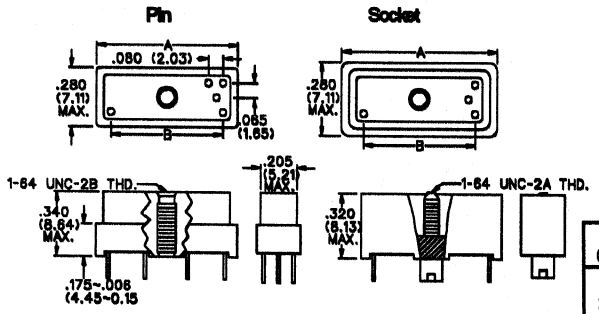


Front View of Pin Insert



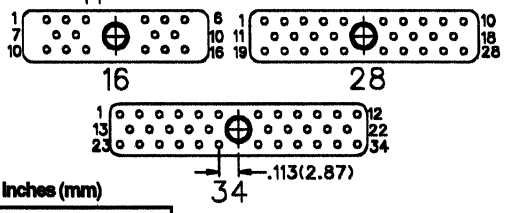
JSS Series / Shrouded

Dimensions / Inches (mm)



Front View of Pin Insert

Identification numbers are for reference only and do not appear on the connectors.



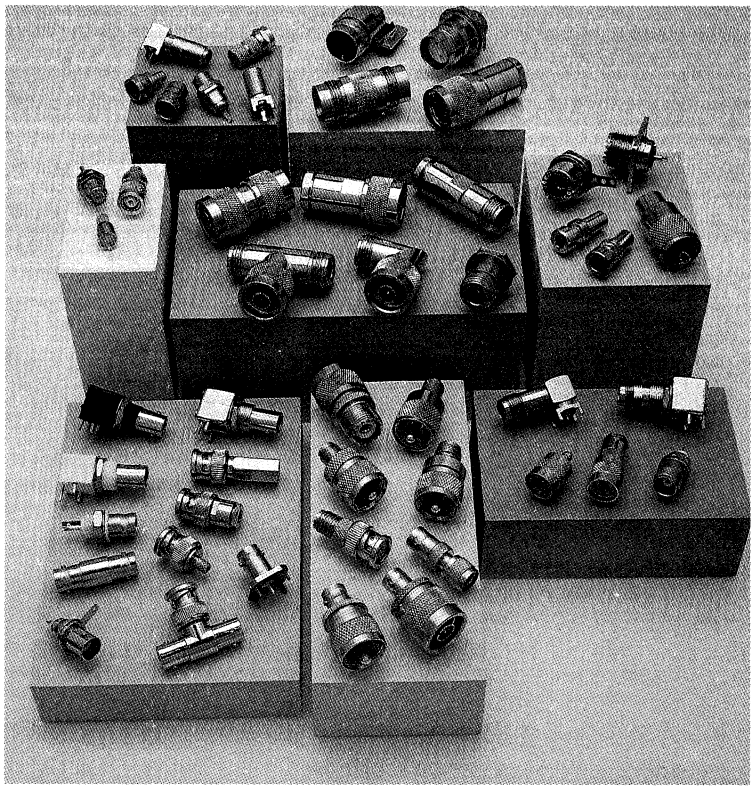
Dimensions / Inches (mm)

No. of Contacts	Dim A Max.	Dim B BSC
16 P or S	.700 17.78	.545 13.64
28 P or S	1.020 25.91	.865 21.97
34 P or S	1.080 29.97	1.025 26.04

Q

RF Coaxial Connectors

Contents

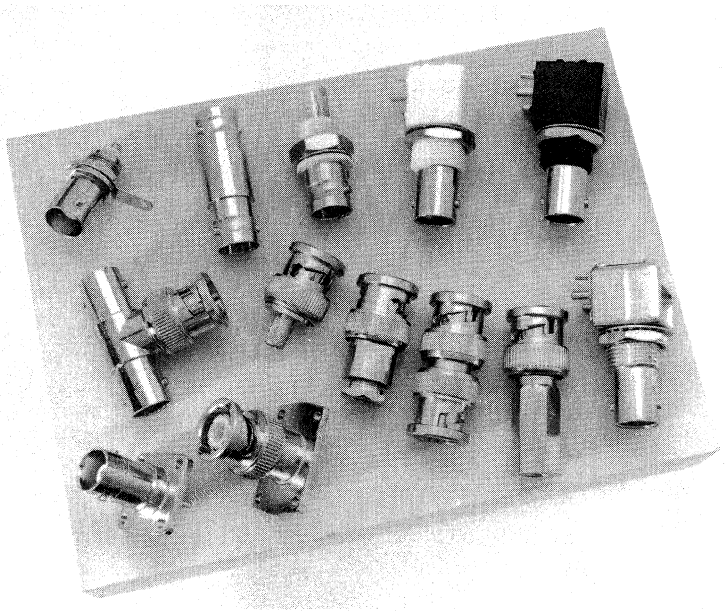


BNC Connectors 2R-8R
TNC Connectors 9R-11R
Twinax Connectors 12R-13R
N Connectors 14R-16R
UHF Connectors 17R-18R
Mini-UHF Connectors 19R-21R
Tooling 22R

BNC Connectors

The BNC range are bayonet locking coaxial connectors used for quick connect/disconnect applications. This series of RF connectors are the most widely used series in the market today. Molex offers a variety of styles, platings and termination methods.

Molex BNC connectors are intermateable with industry standards and MIL-C-39012 connectors. The BNC range comes in 50 Ohm versions. 75 Ohm versions available (limited).



Specifications

Electrical

Impedence:	50 Ohm
Frequency Range:	0-4 GHz
VSWR:	1.3 max 0-4 GHz
Dielectric Withstanding Voltage:	1500 Volts rms
RF Leakage:	–55 dB min. @ 2-3 GHz
Insertion Loss:	.2 dB max A 3 GHz
Voltage Rating:	500 Volts rms
Insulation Resistance:	5000 Megohms min.
Contact Resistance: (Milliohms)	Inner Contact – 1.5 max. Outer Contact – 1.0 max.

Materials

Body:	Brass/Zinc Alloy (Nickel or Silver Plated)
Contacts (Male):	Brass (Tin, Silver or Gold Plated)
(Female):	Phosphor Bronze or Berylium Copper (Tin, Silver or Gold Plated)
Insulator:	Polypropylene or Teflon*
Gasket:	Silicone Rubber
Crimp Ferrule:	Annealed Copper

Mechanical

Mating:	2 Stud Bayonet Locking
Cable Termination (braid or jacket):	Crimp-Hex Crimp Clamp-Screw Threaded Nut
Cable Termination (center conductor):	Crimp or Solder
Cable Retention:	40 lbs. min. (Clamp/Solder) 20 lbs. - 100 lbs. (Crimp) - depends on cable size

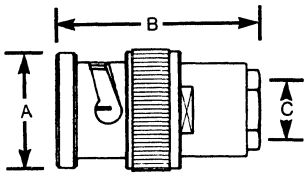
Environmental

Moisture Resistance:	MIL-STD 202 Method 106
Vibration:	MIL-STD 202 Method 204 (Test Condition D)
Shock:	MIL-STD 202 Method 213 (Test Conditon B)
Corrosion:	MIL-STD 202 Method 101 (Test Condition B)
Thermal Shock:	MIL-STD 202 Method 107 D
Operating Temperature	
Polypropylene:	–55°C to +85°C
Teflon:	–65°C to +165°C

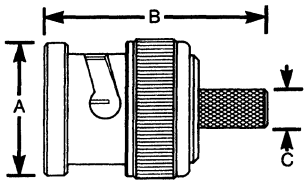
NOTE: 1.) Specifications are typical and may not apply to all connectors.

*Teflon is a registered trademark of E.I. DuPont de Nemours and Company.

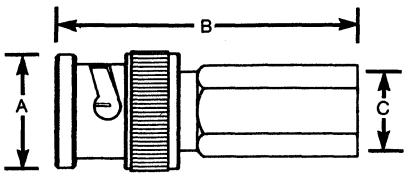
Straight Plugs



Clamp/Solder



Crimp/Crimp



Screw-On

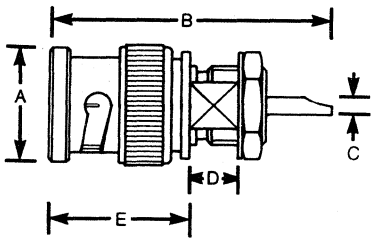
Ordering Information

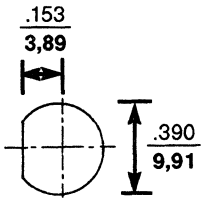
RG/U Cable	Order Number	Termination Style Body/Contact	Dimensions						Features	Dielectric Materials
			A	B	C	D	E	F		
58,141	•73100-5001	Clamp/Solder	.571 **14,5**	.984 **25,0**	.208 **5,30**					Polypropylene
58,141	•73100-5003	Clamp/Solder	.571 **14,5**	.984 **25,0**	.208 **5,30**					Polypropylene
59,62	73101-5001	Clamp/Solder	.571 **14,5**	.984 **25,0**	.251 **6,40**					Polypropylene
59,62	•73101-7003	Clamp/Solder	.571 **14,5**	.984 **25,0**	.251 **6,40**				75 Ohm	Polypropylene
8,213	73102-5001	Clamp/Solder	.571 **14,5**	1.60 **40,6**	.440 **11,2**					Teflon
174,188,316	•73103-5001	Clamp/Crimp	.571 **14,5**	.893 **22,7**	.106 **2,70**					Teflon
174,188,316	•73174-0063	Crimp/Crimp	.571 **14,5**	.917 **23,3**	.106 **2,70**				Captive Contact	Polypropylene
174,188,316	•73174-0073	Crimp/Crimp	.571 **14,5**	.917 **23,3**	.106 **2,70**				Captive Contact	Teflon
58,141	•73104-5001	Crimp/Crimp	.571 **14,5**	.893 **22,7**	.126 **3,20**					Polypropylene
58,141	•73174-0083	Crimp/Crimp	.571 **14,5**	.917 **23,3**	.126 **3,20**				Captive Contact	Polypropylene
58,141	•73174-0093	Crimp/Crimp	.571 **14,5**	.917 **23,3**	.126 **3,20**				Captive Contact	Teflon
59,62	•73105-5001	Crimp/Crimp	.571 **14,5**	.893 **22,7**	.154 **3,90**					Polypropylene
59,62	•73105-5003	Crimp/Crimp	.571 **14,5**	.893 **22,7**	.154 **3,90**					Polypropylene
59,62	•73106-5001	Screw-On	.571 **14,5**	1.42 **36,0**	.213 **5,40**					Polypropylene
59,62	•73174-0103	Crimp/Crimp	.571 **14,5**	.917 **23,3**	.154 **3,90**				75 Ohm Captive Contact	Polypropylene
59,62	•73174-0113	Crimp/Crimp	.571 **14,5**	.917 **23,3**	.154 **3,90**				75 Ohm Captive Contact	Teflon
58,141	73107-5001	Screw-On	.571 **14,5**	1.42 **36,0**	.170 **4,30**					Polypropylene

• U.S. Standard Products are individually packaged and are available through Molex franchised Distributors.
• European Standard products are individually packaged.
—Contact plating designations: *****-***1 = Silver Contact
*****-***3 = Gold Contact

R

Straight Bulkhead Plug (Receptacle)



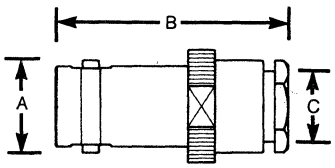


Ordering Information

Order Number	Dimensions						Features	Dielectric Materials
	A	B	C	D	E	F		
73108-5001	.571 **14,5**	.131 **33,2**	.082 **2,10**	.244 **6,20**	.653 **16,6**		Front Mount	Teflon

NOTE: Nut and Washer included with each connector.

Straight Jacks



Clamp/Solder

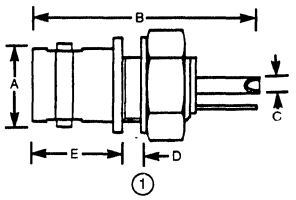
Ordering Information

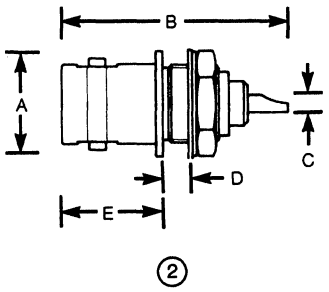
RG/U Cable	Order Number	Termination Style Body/Contact	Dimensions						Features	Dielectric Materials
			A	B	C	D	E	F		
58,141	73112-5001	Clamp/Solder	.433 **11,0**	1.09 **27,8**	.208 **5,30**					Polypropylene
58,141	•73112-5003	Clamp/Solder	.433 **11,0**	1.09 **27,8**	.208 **5,30**					Polypropylene
59,62	73113-5001	Clamp/Solder	.433 **11,0**	1.09 **27,8**	.251 **6,40**					Polypropylene
59,62	•73113-7003	Clamp/Solder	.433 **11,0**	1.09 **27,8**	.251 **6,40**				75 Ohm	Polypropylene

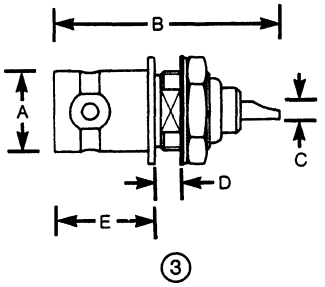
• U.S. Standard Products are individually packaged and are available through Molex franchised Distributors.
• European Standard Products are individually packaged.
—Contact plating designations: *****-***1 = Silver Contact
*****-***3 = Gold Contact

R

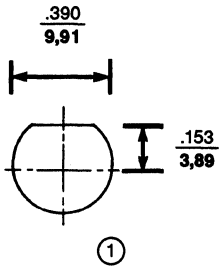
Straight Bulkhead Receptacles

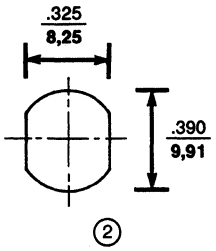






Panel Cut Out



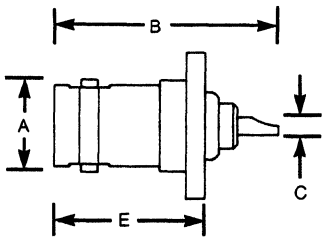


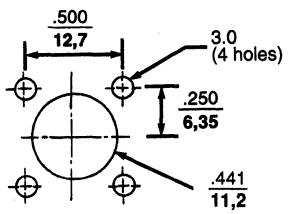
Ordering Information

Order Number	Panel Cutout	Style	Dimensions						Features	Dielectric Materials
			A	B	C	D	E	F		
•73115-5001	1	1	.433 **11,0**	1.18 **30,0**	.082 **2,10**	.200 **5,10**	.472 **12,0**		Front Mount w/ Ground Wire	Polypropylene
•73115-5003	1	1	.433 **11,0**	1.18 **30,0**	.082 **2,10**	.200 **5,10**	.472 **12,0**		Front Mount w/ Ground Wire	Polypropylene
•73119-5001	1	3	.433 **11,0**	1.06 **26,8**	.082 **2,10**	.106 **2,70**	.472 **12,0**		Front Mount W/ Solder Ring	Teflon
•73119-5003	1	3	.437 **11,1**	1.06 **26,8**	.082 **2,10**	.106 **2,70**	.472 **12,0**		Front Mount w/ Solder Ring	Teflon
•73119-7003	1	3	.437 **11,1**	1.06 **26,8**	.082 **2,10**	.106 **2,70**	.472 **12,0**		Front Mount w/ Solder Ring 75 Ohm	Teflon
73120-5001	2	4	.433 **11,0**	1.18 **30,0**	.082 **2,10**	.133 **3,40**	.472 **12,0**		Front Mount w/ Side Nipples	Teflon

NOTE: Nut & washer included with each connector.

Straight Panel Receptacles





Ordering Information

Order Number	Dimensions						Features	Dielectric Materials
	A	B	C	D	E	F		
73124-5001		1.06 **27,0**	.082 **2,10**		.716 **18,2**		3-56 Threaded Holes	Teflon
•73124-5003		1.20 **30,6**	.082 **2,10**		.716 **18,2**		3-56 Threaded Holes	Teflon

NOTES: Threaded mounting hole styles available upon request.
• U.S. Standard Products are individually packaged and are available through Molex franchised Distributors.
• European Standard Products are individually packaged.
—Contact plating designations: *****-***1 = Silver Contact
*****-***3 = Gold Contact

R

PCB Receptacles

Ordering Information

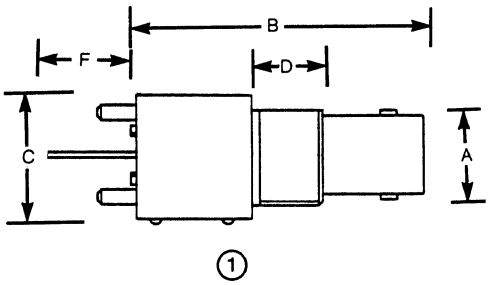
Order Number	Diagram	Style	Dimensions						Features	Dielectric Materials
			A	B	C	D	E	F		
•73131-5003	1	Vertical	.433 **11,0**	1.37 **34,9**	.625 **15,9**	.340 **8,64**	.161 **4,10**	.405 **10,3**	Black Molded Body	Polypropylene
73131-5005	1	Vertical	.433 **11,0**	1.37 **34,9**	.625 **15,9**	.340 **8,64**	.161 **4,10**	.405 **10,3**	Black Molded Body	Polypropylene
•73133-5001	2	Vertical	.433 **11,0**	.661 **16,8**	.677 **17,4**			.154 **3,90**	Brass Body	Teflon
73133-5003	2	Vertical	.437 **11,1**	.661 **16,8**	.677 **17,4**			.405 **10,3**	Brass Body	Teflon
•73137-5003	3	Right Angle	.433 **11,0**	1.37 **34,9**	.519 **13,2**	.272 **6,91**	.161 **4,10**	.187 **4,75**	Black Molded Body Low Profile	Polypropylene
•73137-5005	3	Right Angle	.433 **11,0**	1.37 **34,9**	.519 **13,2**	.272 **6,91**	.161 **4,10**	.187 **4,75**	Black Molded Body Low Profile	Polypropylene
•73137-5013	3	Right Angle	.433 **11,0**	1.37 **34,9**	.519 **13,2**	.272 **6,91**	.161 **4,10**	.187 **4,75**	White Molded Body Low Profile	Polypropylene
73137-5015	3	Right Angle	.433 **11,0**	1.37 **34,9**	.519 **13,2**	.272 **6,91**	.161 **4,10**	.187 **4,75**	White Molded Body Low Profile	Polypropylene
•73138-5003	3	Right Angle	.433 **11,0**	1.37 **34,9**	.625 **15,9**	.338 **8,59**	.161 **4,10**	.187 **4,75**	Black Molded Body	Polypropylene
73138-5005	3	Right Angle	.433 **11,0**	1.37 **34,9**	.625 **15,9**	.338 **8,59**	.161 **4,10**	.187 **4,75**	Black Molded Body	Polypropylene
73138-5013	3	Right Angle	.433 **11,0**	1.37 **34,9**	.625 **15,9**	.338 **8,59**	.161 **4,10**	.187 **4,75**	White Molded Body	Polypropylene
73138-5015	3	Right Angle	.433 **11,0**	1.37 **34,9**	.625 **15,9**	.338 **8,59**	.161 **4,10**	.187 **4,75**	White Molded Body	Polypropylene
73138-5033	3	Right Angle	.433 **11,0**	1.37 **34,9**	.625 **15,9**	.338 **8,59**	.161 **4,10**	.187 **4,75**	All Die-Cast Body	Polypropylene
73139-5003	4	Right Angle	.433 **11,0**	1.37 **34,9**	.625 **15,9**	.338 **8,59**		.187 **4,75**	Black Molded Body W/O Mtg. Posts	Polypropylene
73139-5005	4	Right Angle	.433 **11,0**	1.37 **34,9**	.625 **15,9**	.338 **8,59**		.187 **4,75**	Black Molded Body W/O Mtg. Posts	Polypropylene
73139-5013	4	Right Angle	.433 **11,0**	1.37 **34,9**	.625 **15,9**	.338 **8,59**		.187 **4,75**	White Molded Body W/O Mtg. Posts	Polypropylene
73139-5015	4	Right Angle	.433 **11,0**	1.37 **34,9**	.625 **15,9**	.338 **8,59**		.187 **4,75**	White Molded Body W/O Mtg. Posts	Polypropylene

NOTE: Nut and washer are included with each connector.

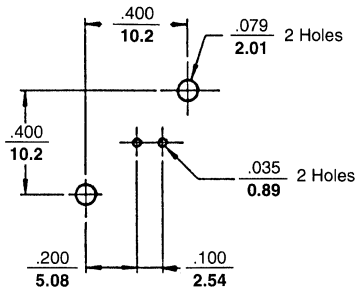
• U.S. Standard Products are individually packaged and are available through Molex franchised Distributors.
• European Standard Products are individually packaged.
—Contact plating designations: *****-***1 = Silver Contact
*****-***3 = Gold Contact
*****-***5 = Tin Contact

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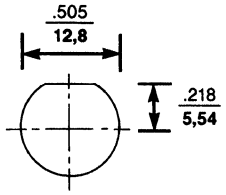
PCB Receptacles



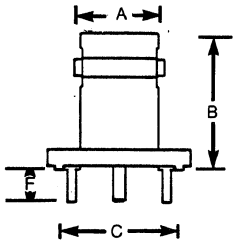
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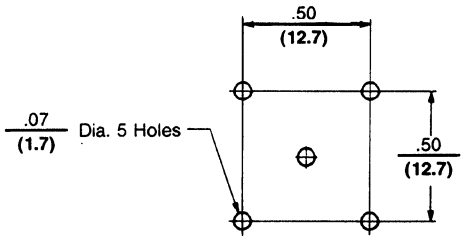
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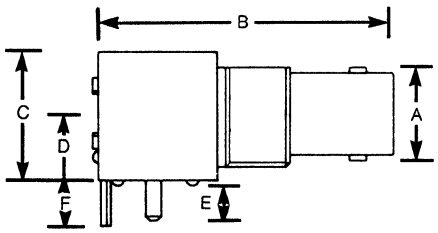
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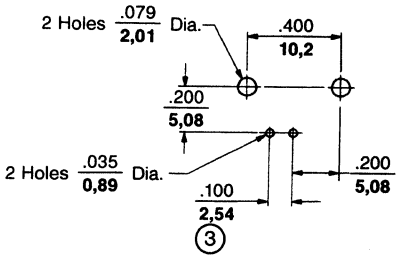
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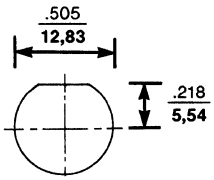
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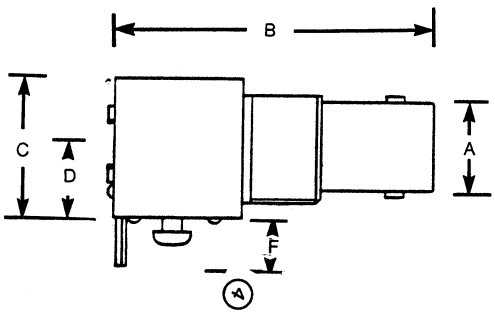
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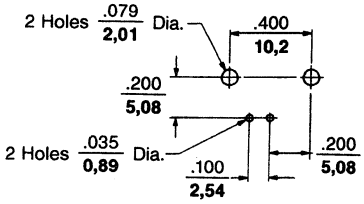
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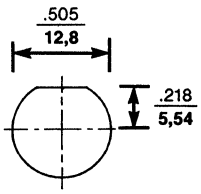
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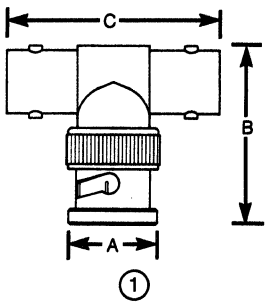
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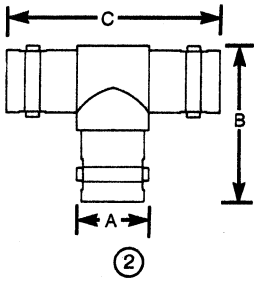


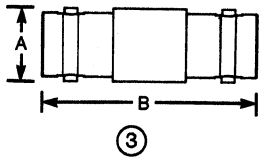
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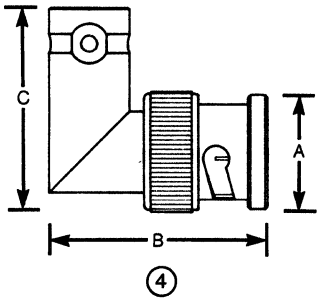
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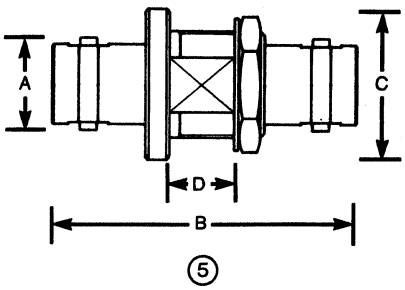
Adapters

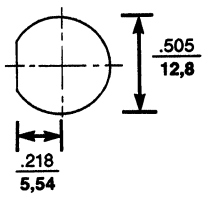


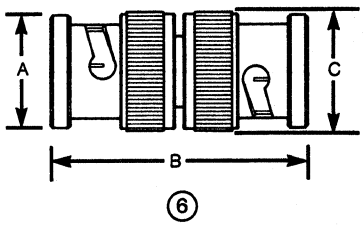












Ordering Information

Order Number	Style	Diagram	Dimensions						Features	Dielectric Materials
			A	B	C	D	E	F		
•73148-5001	Tee J-P-J	1	.571 **14,5**	1.06 **27,0**	1.28 **32,5**				Die-Cast Body	Polypropylene
•73148-5003	Tee J-P-J	1	.571 **14,5**	1.06 **27,0**	1.28 **32,5**				Die-Cast Body	Polypropylene
73149-5001	Tee J-J-J	2	.571 **14,5**	.944 **24,0**	1.28 **32,5**					Polypropylene
•73149-5003	Tee J-J-J	2	.571 **14,5**	.944 **24,0**	1.28 **32,5**					Polypropylene
73150-5001	Straight J-J	3	.571 **14,5**	1.28 **32,5**						Polypropylene
•73150-5003	Straight J-J	3	.571 **14,5**	1.28 **32,5**						Polypropylene
73151-5001	Right Angle J-P	4	.571 **14,5**	1.04 **26,3**	.921 **23,4**					Polypropylene
•73151-5003	Right Angle J-P	4	.571 **14,5**	1.04 **26,3**	.921 **23,4**					Polypropylene
73152-5001	Straight Bulkhead J-J	5	.571 **14,5**	1.42 **36,0**	.708 **18,0**	.214 **5,46**				Polypropylene
•73152-5003	Straight Bulkhead J-J	5	.571 **14,5**	1.42 **36,0**	.708 **18,0**	.214 **5,46**				Polypropylene
73153-5001	Straight P-P	6	.571 **14,5**	1.22 **31,1**	.570 **14,5**					Polypropylene
•73153-5003	Straight P-P	6	.571 **14,5**	1.22 **31,1**	.570 **14,5**					Polypropylene

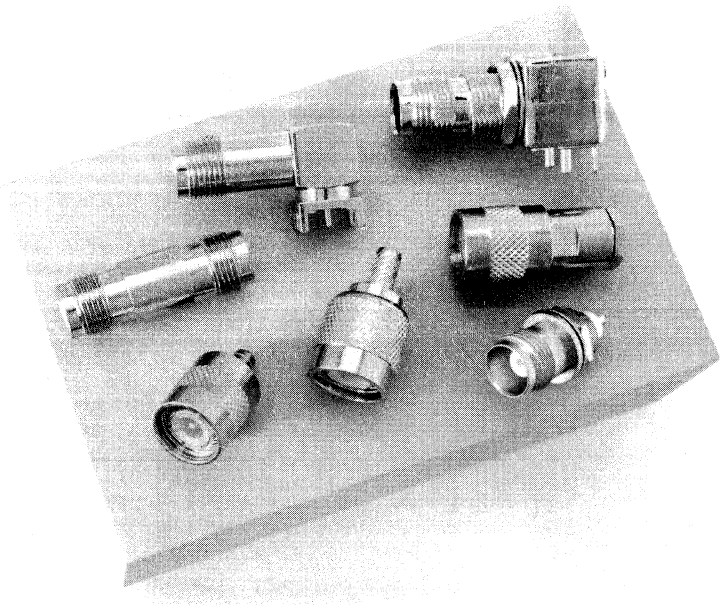
• U.S. Standard Products are individually packaged and are available through Molex franchised Distributors.
•European Standard Products are individually packaged.
—Contact plating designations: *****-***1 = Silver Contact
*****-***3 = Gold Contact

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TNC Connectors

TNC coaxial connectors are screw coupled versions of the BNC series. The increased rigidity of the screw coupling gives the TNC range a more consistent performance than the BNC under adverse operating conditions.

The TNC range is fully interchangeable with industry standards and MIL-C-39012 versions. The TNC range comes in 50 Ohm versions. 75 Ohm versions available (limited).



Specifications

Electrical

Impedence:	50 Ohm
Frequency Range:	0-11 GHz
VSWR:	1.3 max 0-11 GHz
Dielectric Withstanding Voltage:	1500 Volts rms
RF Leakage:	–55 dB min. @ 2-3 GHz
Insertion Loss:	.2 dB max @ 3 GHz
Voltage Rating:	500 Volts rms
Insulation Resistance:	5000 Megohms min.
Contact Resistance: (Milliohms)	Inner Contact – 1.5 max. Outer Contact – 1.0 max.

Materials

Body:	Brass/Zinc Alloy (Nickel or Silver Plated)
Contacts (Male):	Brass (Silver or Gold Plated)
(Female):	Phosphor Bronze or Berylium Copper
Insulator:	Polypropylene or Teflon*
Gasket:	Silicone Rubber
Crimp Ferrule:	Annealed Copper

Mechanical

Mating:	$^{7}/_{16}$ - 28 Threaded Coupling
Cable Termination (braid or jacket):	Crimp-Hex Crimp Clamp-Screw Coupled Nut
Cable Termination (center conductor):	Crimp or Solder
Cable Retention:	40 lbs. min. (Clamp/Solder) 20 lbs. - 100 lbs. (Crimp) - depends on cable size

Environmental

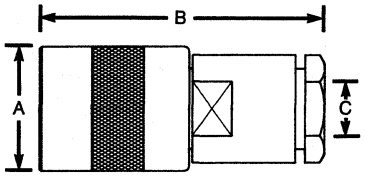
Moisture Resistance:	MIL-STD 202 Method 106
Vibration:	MIL-STD 202 Method 204 (Test Condition D)
Shock:	MIL-STD 202 Method 213 (Test Conditon B)
Corrosion:	MIL-STD 202 Method 101 (Test Condition B)
Thermal Shock:	MIL-STD 202 Method 107 Condition D
Operating Temperature:	
Polypropylene:	–55° to +85°C
Teflon:	–55° to +199°C

NOTE: 1.) Specifications are typical and may not apply to all connectors.

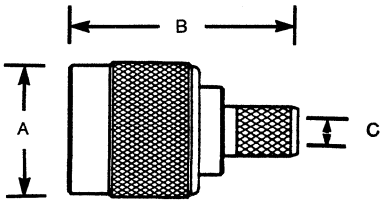
*Teflon is a registered trademark of E.I. DuPont de Nemours and Company.

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Straight Plugs



Clamp/Solder

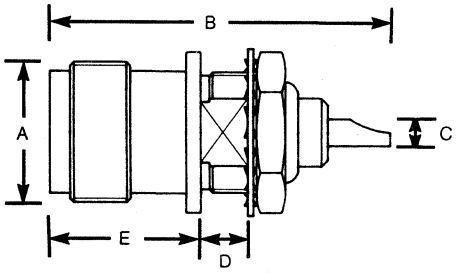


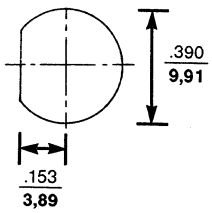
Crimp/Crimp

Ordering Information

RG/U Cable	Order Number	Termination Style Body/Contact	Dimensions						Features	Dielectric Materials
			A	B	C	D	E	F		
58,141	73176-5001	Clamp/Solder	.500 **12,7**	1.10 **28,0**	.208 **5,30**				3-piece assembly	Polypropylene
59,62	73177-5001	Clamp/Solder	.500 **12,7**	1.10 **28,0**	.251 **6,40**				3 piece assembly	Polypropylene
58,141	•71378-5001	Crimp/Crimp	.571 **14,5**	.100 **25,3**	.125 **3,20**				Captive Contact	Polypropylene
58,141	•73219-0023	Crimp/Crimp	.571 **14,5**	.100 **25,3**	.125 **3,20**				Captive Contact	Polypropylene
58,141	•73219-0033	Crimp/Crimp	.571 **14,5**	.100 **25,3**	.125 **3,20**				Captive Contact	Teflon
59,62	•73179-5001	Crimp/Crimp	.571 **14,5**	.100 **25,3**	.153 **3,90**				Captive Contact	Polypropylene
59,62	•73219-0043	Crimp/Crimp	.571 **14,5**	.100 **25,3**	.153 **3,90**				75 Ohm Captive Contact	Polypropylene
59,62	•73219-0053	Crimp/Crimp	.571 **14,5**	.100 **25,3**	.153 **3,90**				75 Ohm Captive Contact	Teflon

Straight Bulkhead Receptacle





Ordering Information

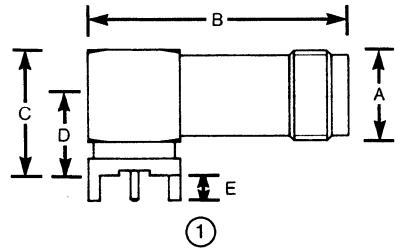
Order Number	Dimensions						Features	Dielectric Materials
	A	B	C	D	E	F		
73191-5001	7/16-28 UNEF	1.06 **27,0**	.082 **2,10**	.133 **3,40**	.472 **12,0**			Teflon
•73191-5003	7/16-28 UNEF	1.06 **27,0**	.082 **2,10**	.133 **3,40**	.472 **12,0**			Teflon

NOTE: Nut and Washer included with each Connector.

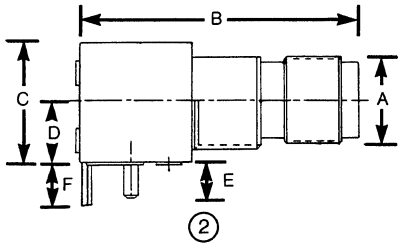
• U.S. Standard Products are individually packaged and are available through Molex franchised Distributors.
•European Standard Products are individually packaged.
—Contact plating designations: *****-****1 = Silver Contact
*****-****3 = Gold Contact

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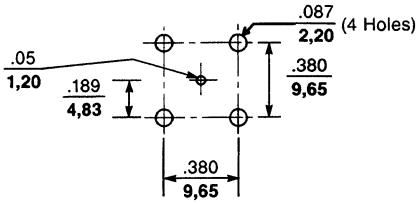
Right Angle PCB Receptacles

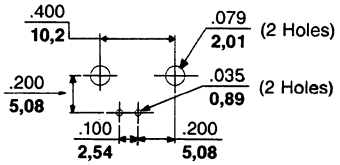


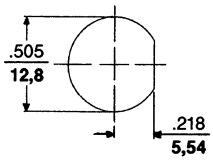
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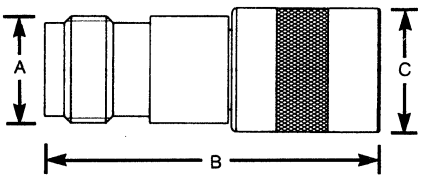
Ordering Information

Order Number	Panel Cutout	Dimensions						Features	Dielectric Materials
		A	B	C	D	E	F		
•73204-5003	1	7/16-28 UNEF	1.22 **31,0**	.590 **15,0**	.374 **9,50**	.118 **3,00**		Brass Body	Teflon
••73205-5033	2	7/16-28 UNEF	1.38 **34,9**	.625 **15,9**	.338 **8,59**	.161 **4,10**	.187 **4,75**	Die-Cast	Polypropylene

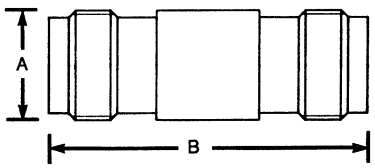
NOTE: Nut & washer included with P/N 73205-5033 only.

—PCB style connectors are packaged in trays.

Adapters



J-P



J-J

Ordering Information

Order Number	Style	Dimensions						Features	Dielectric Materials
		A	B	C	D	E	F		
73212-5001	Straight J-P	7/16-28 UNEF	1.35 **34,3**	.500 **1,27**					Polypropylene
•73212-5003	Straight J-P	7/16-28 UNEF	.135 **34,3**	.500 **1,27**					Polypropylene
73213-5001	Straight J-J	7/16-28 UNEF	.128 **32,5**						Teflon
•73213-5003	Straight J-J	7/16-28 UNEF	.128 **32,5**						Teflon

• U.S. Standard Product are individually packaged and are available through Molex franchised Distributors.
• European Standard Products are individually packaged.
—Contact plating designations: *****-***1 = Silver Contact
*****-***3 = Gold Contact

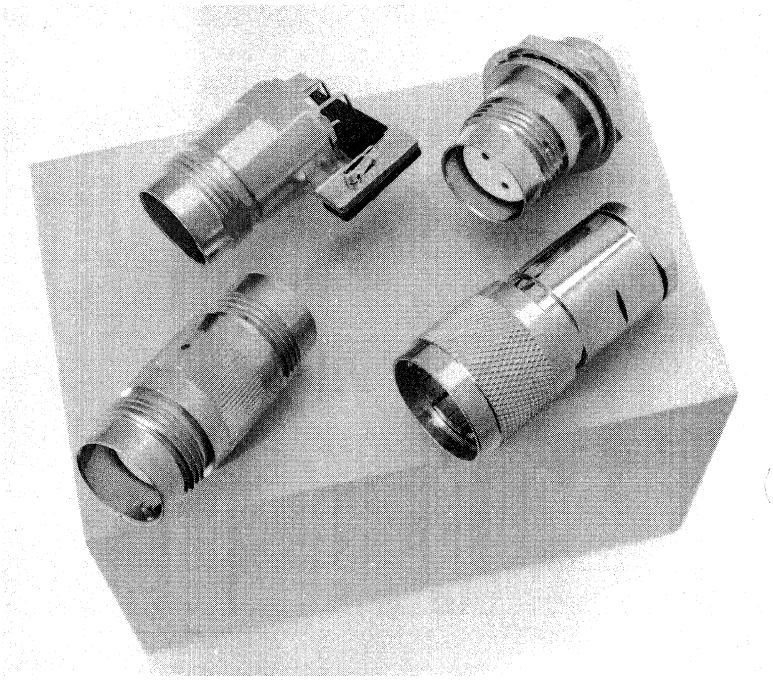
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Twinax Connectors

Molex series of Twinax (dual conductor) connectors are designed to interface computer and other balanced line data transmission systems. All connectors offer an independent keyway to polarize the mating face and insure correct alignment.

The Twinax construction provides high signal integrity for low level signal handling and make them ideal for the most demanding applications.

Molex Twinax connectors meet IBM specifications for use on IBM 34 and 38 systems.



Specifications

Electrical

Impedence:	Non-Constant (used with 95Ω twin conductor cable)
Frequency Range:	0-200 MHz (0-500 MHz w/ caution)
Dielectric Withstanding Voltage:	1000 Volts rms
Voltage Rating:	500 Volts rms
Insulation Resistance:	5000 Megohms min.

Materials

Body:	Brass/Zinc Alloy (Nickel Plated)
Contacts (Male):	Brass (Silver or Gold Plated)
(Female):	Phosphor Bronze (Silver or Gold Plated)
Insulator:	Noryl* or Teflon**
Gasket:	Silicone Rubber

Mechanical

Mating:	3/4 - 20 Threaded (Polarized)

Environmental

Temperature Range:	
Noryl:	–55° to +85°C
Teflon:	–65° to +154°C

NOTES:

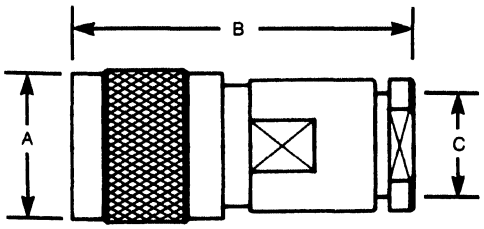
1.) Meets MIL-C-3655 where applicable.

2.) Specifications are typical and may not apply to all connectors.

*Noryl is a registered trademark of General Electric Company.
**Teflon is a registered trademark of E.I. DuPont de Nemours and Company.

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Straight Plug

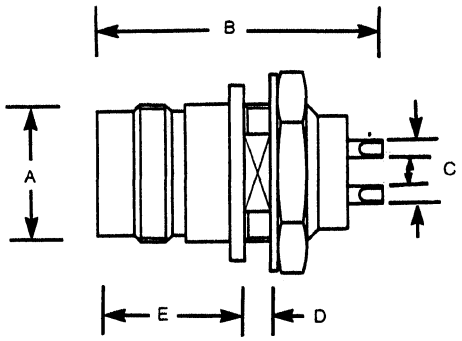


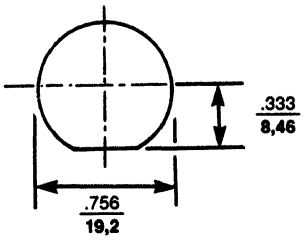
Ordering Information

RG/U Cable	Order Number	Termination Style Body/Contact	Dimensions						Features
			A	B	C	D	E	F	
Belden 8227, 9207 IBM 7362211	•73221-1001	Clamp/Solder	.823 **21,0**	1.89 **48,1**	.343 **8,70**				IBM # 7362229
Belden 8227, 9207 IBM 7362211	•73253-0013*	Clamp/Solder **OR** Crimp/Crimp	.823 **21,0**	1.89 **48,1**	.343 **8,70**				Captive Contacts

* **NOTE:** 73253-0013 is supplied with one silver and one gold contact.

Straight Bulkhead Receptacle



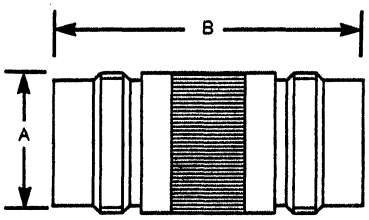


Ordering Information

Order Number	Style	Dimensions						Features
		A	B	C	D	E	F	
•73228-1001	Front Mount	3/4-20 UNEF	1.53 **38,8**	.091 **2,30**	.165 **4,20**	.787 **20,0**		IBM # 7362179

NOTE: Nut and washer included with each connector.

Straight Adapter



Ordering Information

Order Number	Dimensions						Features
	A	B	C	D	E	F	
•73236-1001	3/4-20 UNEF	1.67 **42,4**					IBM # 7362230

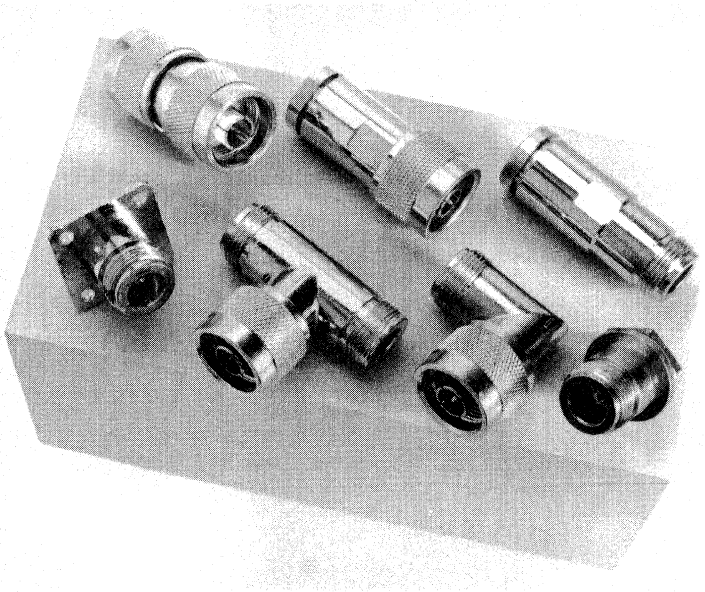
• U.S. Standard Products are individually packaged and are available through Molex franchised Distributors.
• European Standard Products are individually packaged.
—Contact plating designations: *****-***1 = Silver Contact
*****-***3 = Gold Contact

R

N Connectors

Molex N range of coaxial connectors are screw coupled, 5/8 - 24, designed for use up to 11 GHz. N Connectors are medium size connectors used in test and instrumentation equipment.

Molex N series mates with industry standards and MIL-C-39012 connectors and offer air dielectric when mated. The N series range comes in 50 Ohm versions. 75 Ohm versions available (limited).



Specifications

Electrical

Impedence:	50 Ohm
Frequency Range:	0-11 GHz
VSWR:	1.3 max @ 0-11 GHz
Dielectric Withstanding Voltage:	2500 Volts rms
RF Leakage:	–90 dB min. @ 2-3 GHz
Insertion Loss:	.15 dB max @ 10 GHz
Voltage Rating:	1000 Volts rms
Insulation Resistance:	5000 Megohms max.
Contact Resistance: (milliohms)	Inner Contact – 1.5 max. Outer Contact – 1.0 max.

Materials

Body:	Brass (Nickel or Silver Plated)
Contacts (Male):	Brass (Silver or Gold Plated)
(Female):	Phosphor Bronze (Silver or Gold Plated)
Insulator:	Teflon* or Polypropylene
Gasket:	Silicone Rubber
Crimp Ferrule:	Annealed Copper

Mechanical

Mating:	5/8 - 24 Threaded
Cable Termination (braid or jacket):	Crimp-Hex Crimp Clamp-Screw Coupled Nut
Cable Termination (center conductor):	Solder
Cable Retention:	30#lbs. to 70#lbs.

Environmental

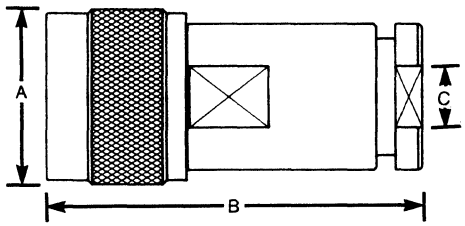
Moisture Resistance:	MIL-STD 202 Method 106
Vibration:	MIL-STD 202 Method 204 (Test Condition B)
Shock:	MIL-STD 202 Method 213 (Test Conditon I)
Corrosion:	MIL-STD 202 Method 101 (Test Condition B)
Thermal Shock:	MIL-STD 202 Method 107 (Test Condition D)
Operating Temperature:	
Polypropylene:	–55° to +85°C
Teflon:	–65° to +165°C

NOTE: 1.) Specifications are typical and may not apply to all connectors.

*Teflon is a registered trademark of E.I. DuPont de Nemours and Company.

R

Straight Plugs

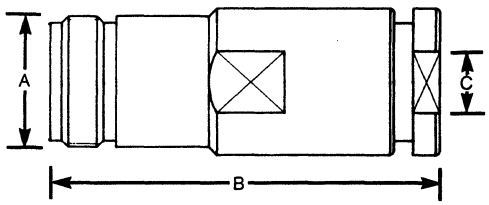


Clamp/Solder

Ordering Information

RG/U Cable	Order Number	Termination Style Body/Contact	Dimensions						Features	Dielectric Materials
			A	B	C	D	E	F		
59,62	•73255-5003	Clamp/Solder	.826 **21,0**	1.77 **45,0**	.251 **6,40**					Teflon
8,213	••73256-5003	Clamp/Solder	.826 **21,0**	1.77 **45,0**	.440 **11,2**					Teflon
58,141	73257-5003	Clamp/Solder	.826 **21,0**	1.77 **45,0**	.208 **5,30**					Teflon

Straight Jacks



Clamp/Solder

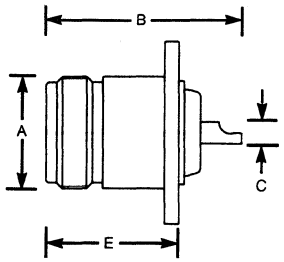
Ordering Information

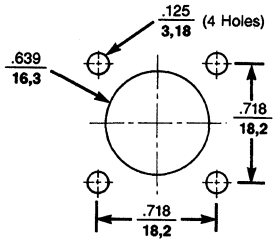
RG/U Cable	Order Number	Termination Style Body/Contact	Dimensions						Features	Dielectric Materials
			A	B	C	D	E	F		
8,213	•73265-5003	Clamp/Solder	5/8-24 UNEF	1.83 **46,5**	.440 **11,2**					Teflon
59,62	73266-5003	Clamp/Solder	5/8-24 UNEF	1.83 **46,5**	.251 **6,40**					Teflon

• U.S. Standard Products are individually packaged and are available through Molex franchised Distributors.
• European Standard Products are individually packaged.
—Contact plating designations: *****-***1 = Silver Contact
*****-***3 = Gold Contact

R

Straight Panel Receptacle



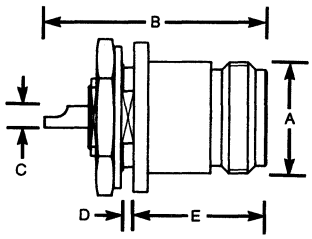


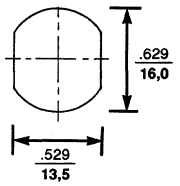
Ordering Information

Order Number	Dimensions						Features	Dielectric Materials
	A	B	C	D	E	F		
•73270-5003	5/8-24 UNEF	1.09 **27,6**	.118 **3,00**		.736 **18,7**		3.2 mm Through Holes	Teflon

NOTE: Other panel mounting hole styles available upon request.

Straight Bulkhead Receptacle



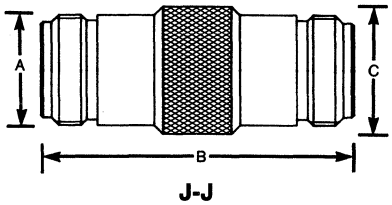


Ordering Information

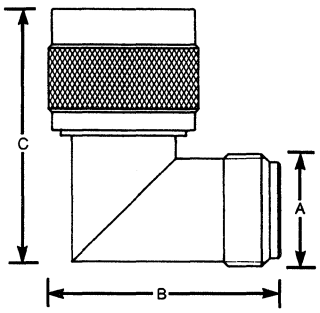
Order Number	Dimensions						Features	Dielectric Materials
	A	B	C	D	E	F		
•73271-5003	5/8-24 UNEF	1.23 **31,2**	.118 **3,00**	.051 **2,50**	.736 **18,7**		Front Mount	Teflon

NOTE: Nut and washer included with each connector.

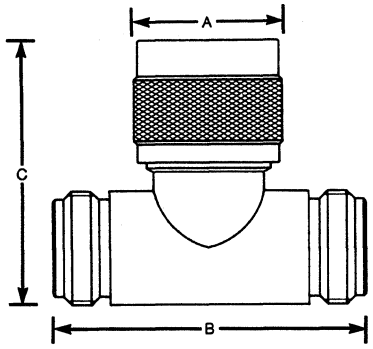
Adapters



J-J



J-P



J-P-J

Ordering Information

Order Number	Style	Dimensions						Features	Dielectric Materials
		A	B	C	D	E	F		
•73275-5003	Straight J-J	5/8-24 UNEF	1.73 **44,0**	.708 **18,0**					Teflon
•73276-5003	Right Angle J-P	5/8-24 UNEF	1.26 **31,9**	1.38 **35,0**					Teflon
•73277-5003	Tee J-P-J	.826 **21,0**	1.73 **44,0**	1.44 **36,7**					Teflon

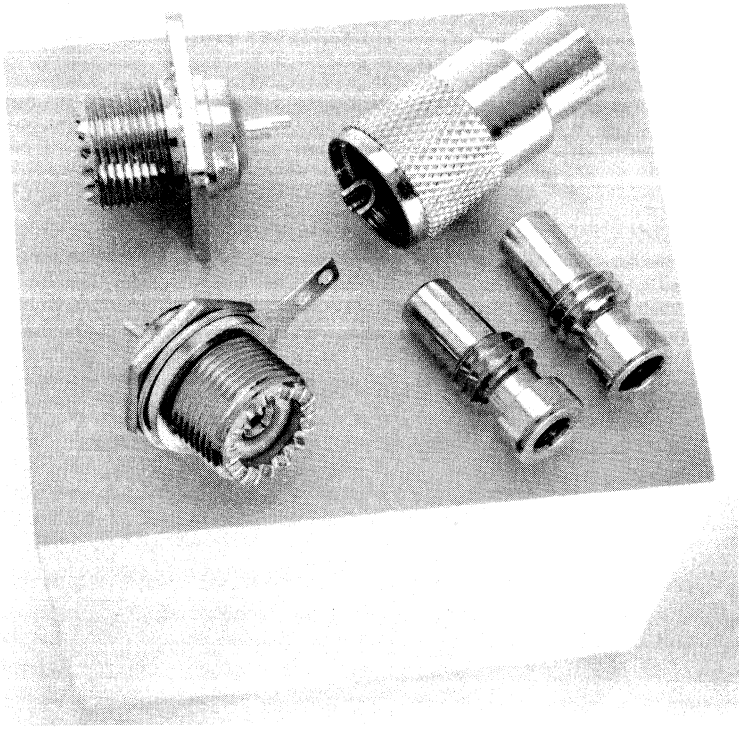
• U.S. Standard Products are individually packaged and are available through Molex franchised Distributors.
• European Standard Products are individually packaged.
—Contact plating designations: *****-***1 = Silver Contact
*****-***3 = Gold Contact

R

UHF Connectors

Molex UHF coaxial connector range are robustly designed for general purpose applications. Mobile communications market is the best suited for this low frequency connector.

The UHF series offers a variety of connector styles and accessories. Thread size for all UHF connectors are 5/8 - 24.



Specifications

Electrical

Impedence:	Non-Constant
Frequency Range:	0-300 MHz
Dielectric Withstanding Voltage:	1500 Volts rms
Voltage Rating:	500 Volts rms
Insulation Resistance:	5000 Megohms max.

Materials

Body:	Brass or Zinc Alloy (Nickel or Silver Plated)
Contacts (Male):	Brass (Silver or Gold Plated)
(Female):	Phosphor Bronze (Silver or Gold Plated)
Insulator:	Nylon
Crimp Ferrule:	Annealed Copper

Mechanical

Mating:	5/8 - 24 Threaded

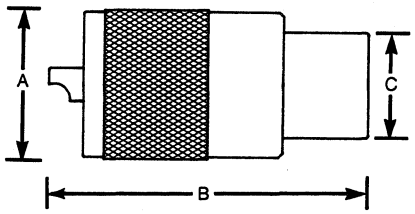
Environmental

Temperature Range:	
Nylon:	–55° to +85°C

NOTE: Specifications are typical and may not apply to all connectors.

R

Straight Plugs

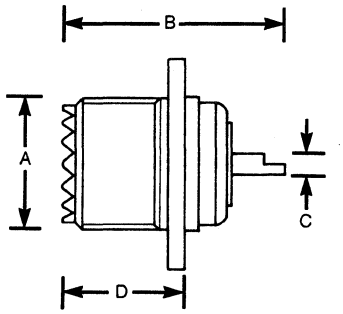


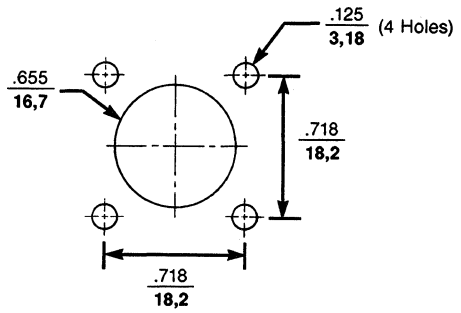
Solder/Solder

Ordering Information

RG/U Cable	Order Number	Termination Style Body/Contact	Dimensions						Features	Insulating Materials
			A	B	C	D	E	F		
8,213	••73281-0001	Solder/Solder	.708 **18,0**	1.46 **37,6**	.374 **9,50**					Nylon

Straight Panel Receptacles



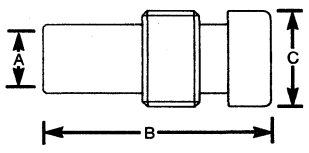


Ordering Information

Order Number	Dimensions						Features	Insulating Materials
	A	B	C	D	E	F		
••73288-0001	5/8-24 UNEF	1.03 **26,2**	.098 **2,50**	.579 **14,7**			3.2 mm Through Holes	Nylon

NOTE: Other panel mounting hole styles available upon request.

Adapters



Reducing Adapter

Ordering Information

Order Number	Style	Dimensions						Features
		A	B	C	D	E	F	
•73291-0001	Straight	.254 **6,47**	1.00 **25,4**	.433 **11,0**				Reducing Adapter for RG 59,62
•73292-0001	Straight	.208 **5,30**	1.00 **25,4**	.433 **11,0**				Reducing Adapter for RG 58,141

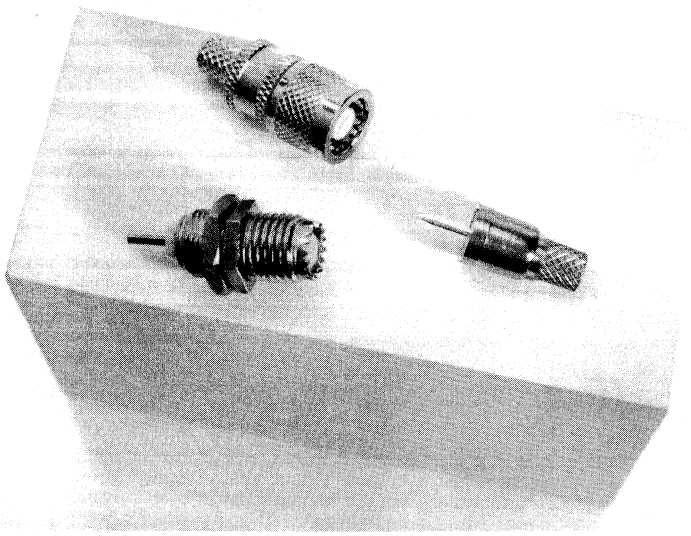
• U.S. Standard Products are individually packaged and are available through Molex franchised Distributors.
• European Standard Products are individually packaged.
—Contact plating designations: *****-***1 = Silver Contact
*****-***3 = Gold Contact

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Mini-UHF Connectors

The Mini-UHF range are designed where space is at a minimum and where frequencies are needed up to 2.0 GHz.

The Molex Mini-UHF range is fully intermateable with industry standards. The screw coupled thread size is 3/8 - 24.



Specifications

Electrical

Impedence:	50 Ohm
Frequency Range:	0-2.5 GHz
VSWR:	1.25 max. 0-2 GHz
Dielectric Withstanding Voltage:	1000 Volts rms for 1 min.
Voltage Rating:	335 Volts rms
Insulation Resistance:	5000 Megohms min.

Materials

Body:	Brass or Zinc Alloy (Nickel or Silver Plated)
Contacts (Male):	Brass (Silver or Gold Plated)
(Female):	Phosphor Bronze (Silver or Gold Plated)
Insulator:	Duracon or Teflon*
Crimp Ferrule:	Annealed Copper

Mechanical

Mating:	3/8 - 24 Threaded
Cable Termination (braid or jacket):	Crimp-Hex Crimp Clamp-Pressure Clip
Cable Termination (center conductor):	Solder
Cable Retention:	40 lbs. min. (RG 58/U)

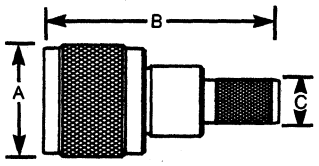
Environmental

Temperature Range:	
Duracon:	–55° to +85°C
Teflon:	–65° to +165°C
NOTE:	Specifications are typical and may not apply to all connectors.

*Teflon is a registered trademark of E.I. DuPont de Nemours and Company.

R

Straight Plugs

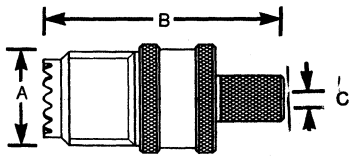


Crimp/Crimp

Ordering Information

RG/U Cable	Order Number	Termination Style Body/Contact	Dimensions						Dielectric Materials
			A	B	C	D	E	F	
58,141	•73302-0001	Crimp/Crimp	.459 **11,5**	.949 **24,1**	.125 **3,20**				Duracon
58,141	•73302-0003	Crimp/Crimp	.459 **11,5**	.949 **24,1**	.125 **3,20**				Duracon

Straight Jacks



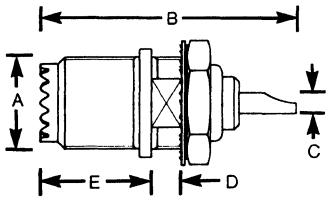
Ordering Information

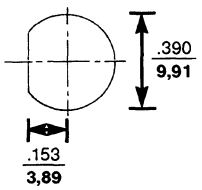
RG/U Cable	Order Number	Termination Style Body/Contact	Dimensions						Dielectric Materials
			A	B	C	D	E	F	
58,141	73309-0001	Crimp/Crimp	$^{3}/_{8}$-24 UNEF	.965 **24,5**	.122 **3,10**				Duracon

• U.S. Standard Products are individually packaged and are available through Molex franchised Distributors.
• European Standard Products are individually packaged.
—Contact plating designations: *****-***1 = Silver Contact
*****-***3 = Gold Contact

R

Straight Bulkhead Receptacle





Ordering Information

Order Number	Termination Style Body/Contact	Dimensions						Dielectric Material
		A	B	C	D	E	F	
•73316-0001	Solder	3/8-24 UNEF	1.02 **26,0**	.082 **2,10**	.118 **3,00**	.448 **11,4**		Duracon

NOTE: Nut and washer included with each connector.

• U.S. Standard Products are individually packaged and are available through Molex franchised Distributors.
—Contact plating designations: *****-***1 = Silver Contact
*****-***3 = Gold Contact

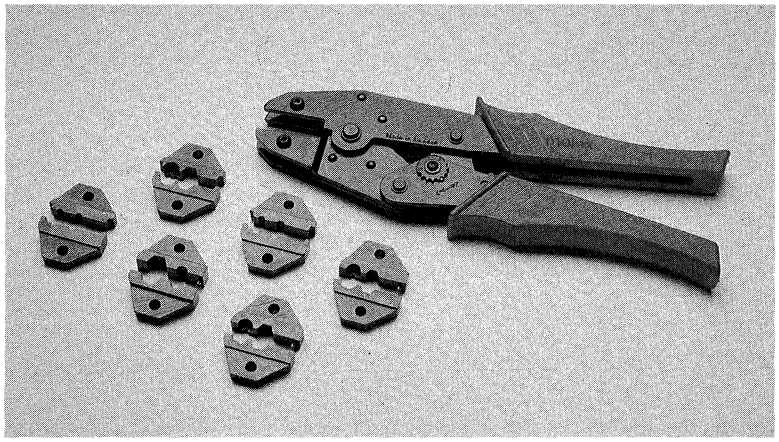
R

RF Coaxial Connector Crimp Tools

Molex crimp tools offer quality and durability as well as reliability.

Each tool is equipped with safety releases and is fully racheted to provide convenience and operating ease for every crimp.

Note: Tools are only required for crimp version connectors



Hand Tool Ordering Information

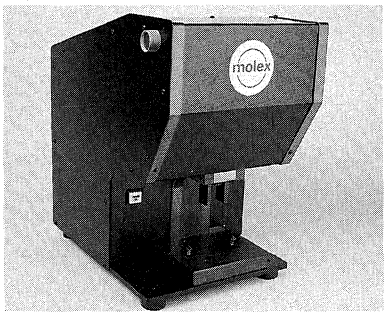
RG/U Cable	Series	Hand Tool		Dies	
		Eng. No.	Order No.	Eng. No.	Order No.
55, 58, 141A, 142B	BNC, TNC, SMA	AM60039-6	11-31-6379	AM63103-1	11-31-9025
59, 62	BNC, TNC	AM60039-6	11-31-6379	AM63103-2	11-31-9026
174, 188, 316	BNC	AM60039-6	11-31-6379	AM63103-3	11-31-9027

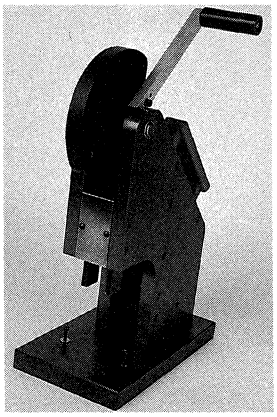
Hand tool and dies must be ordered separately.

* For part numbers 73367-142X, 73380-142X, 73384-142X, 73407-142X, 73420-142X, 73424-142X use die number 11-31-9027.

Manual & Electric Press Options

☐ Employs same crimp dies as hand tool (not included)





Ordering Information

Order No.	Description	Eng. No.
11-31-6356	Basic Manual Press	AM-60026
11-31-7559	Die Holder Fixture	AM-60063
11-21-9507	Basic Press & Fixture	AM-60098
11-31-9639	Electric Press (120 volt)	AM-60078-120
11-31-9243	Electric Press (220 volt)	AM-60078-220

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Switches

Introduction



From simple cost effective membrane switches, to fully integrated control panels, Molex is your quality source.

Our Total Quality Commitment demands exhaustive testing of materials, components, and completed assemblies. Our stringent quality assurance programs incorporate such resources as Advanced Quality Planning (AQP), and Failure Mode and Effects Analysis (FMEA). With Molex switch products, these are more than just words: they are a way of life.

With Molex switch products, you can draw on the worldwide resources of a Fortune 500 company, with plant locations in the U.S. and France. Since both locations have engineering staffs with unmatched experience in electronics and electrical applications, you are assured that our manufactured part will exactly meet your Critical Characteristics, and overall Design Requirements.

Molex Switch Products: Quality. Reliability. Stability.

Contents

Membrane Switch and Control Panel Construction and Specifications 2S-4S

Advanced Quality Planning Sheet 5S

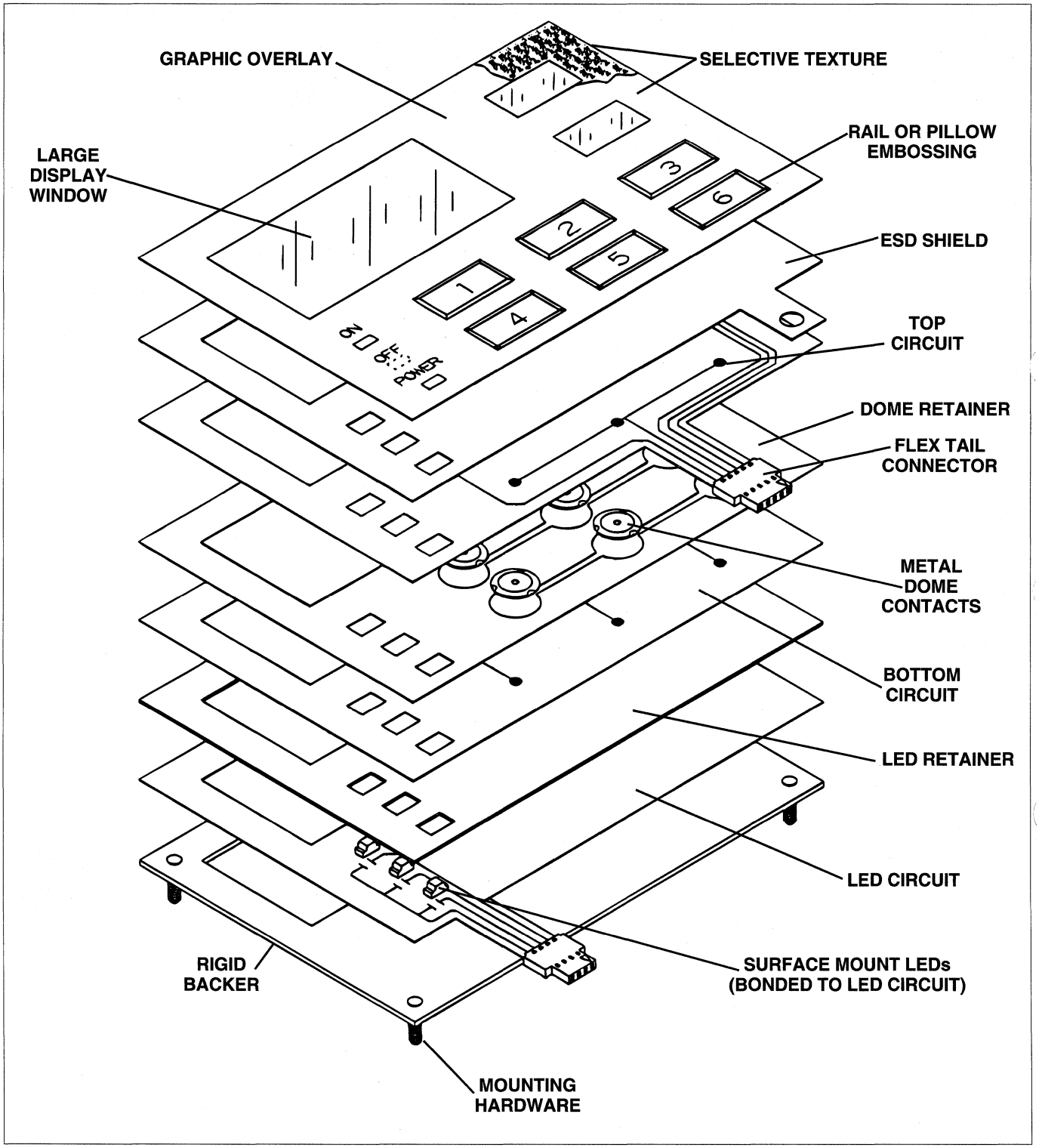
Standard Membrane Switches 6S-7S, 10S-11S

Connectors for Flexible Control Panels 8S, 9S

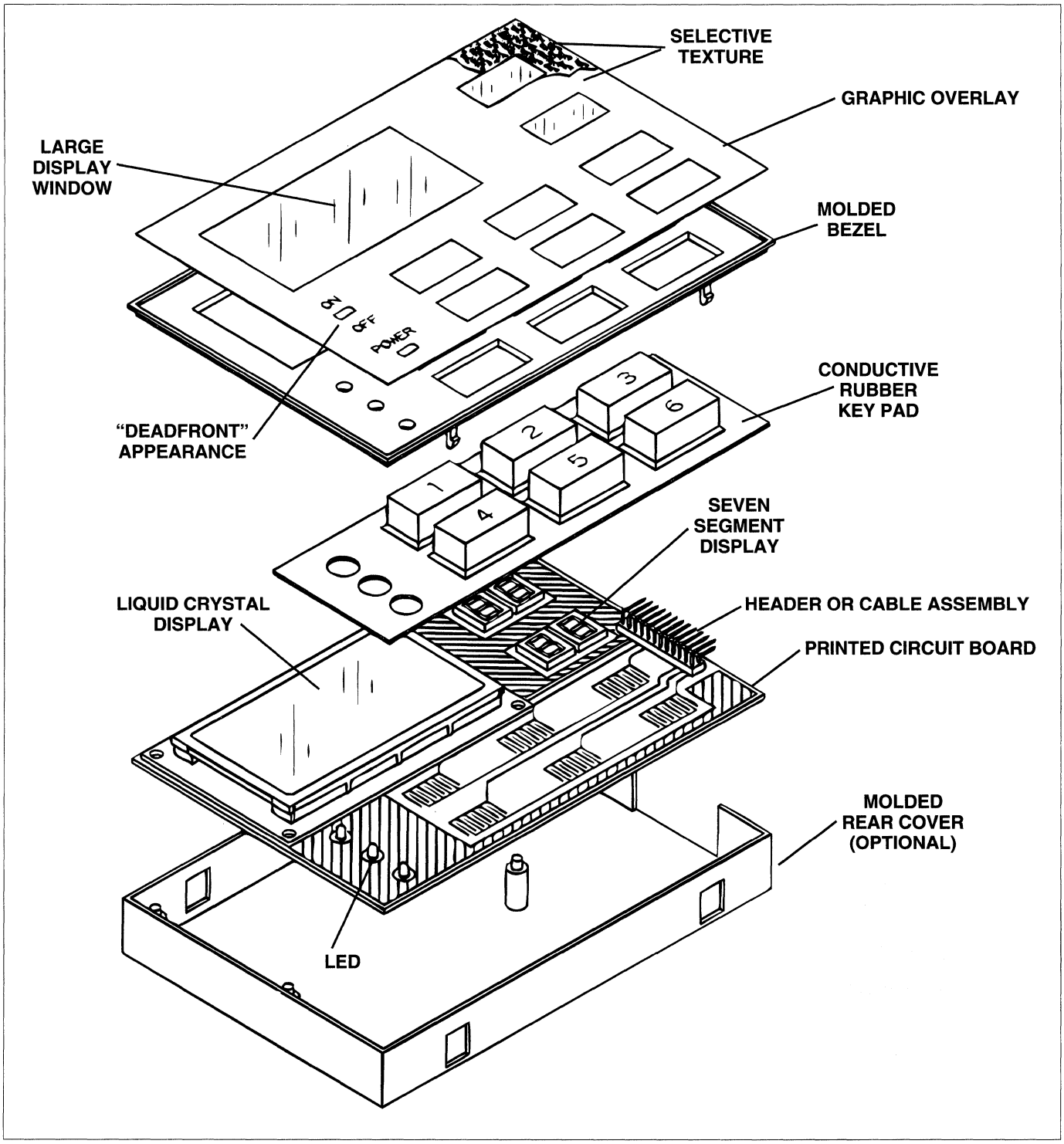
Pushbutton Switches 12S-17S

Connectors for Pushbutton Switches 18S

Typical Membrane Switch Construction and Options



Typical Control Panel Construction



Membrane Switch: Nontactile; Tactile; Bonded Components

Electrical

Contact Rating — 28V dc, 30mA
Life, Nontactile — 5,000,000 operations minimum at maximum rated load
Life, Tactile — 1,000,000 operations minimum at maximum rated load
Termination Resistance — 100 Ohms maximum
Contact Bounce, Nontactile — Less than 3 milliseconds
Contact Bounce, Tactile — Less than 10 milliseconds
Switch Capacitance — Less than 20 picofarads (without shielding option)

Mechanical

Actuation Force, Nontactile — 2 ounces minimum
Force, Tactile — 16 ounces nominal
Button Travel, Nontactile — .003" to .008"
Button Travel, Tactile — .015" to .025", depending on dome contact style
Shock — 50 G. (3 hits on each axis)
Panel Thickness — .032" / .090" (typical)

Environmental

Temperature Range — -40°C to +70°C
Humidity — Per MIL Std. 202E, Method 103B
Salt Fog — -5% solution for 48 hours

Membrane Switch: Hybrids and Control Panels

Electrical

Contact Rating — 28V dc, 30 mA
Life, Nontactile — 5,000,000 operations minimum at maximum rated load
Life, Tactile — 1,000,000 operations minimum at maximum rated load
Life, Silicone Rubber Design — 200,000 to 5,000,000 operations, depending on actuator design and actuation force
Termination Resistance — 100 Ohms maximum
Contact Bounce, Nontactile — Less than 3 milliseconds
Contact Bounce, Tactile — Less than 10 milliseconds
Contact Bounce, Silicone Rubber — Less than 10 milliseconds
Switch Capacitance — Less than 20 picofarads (without shielding option)

Mechanical

Actuation Force, Nontactile — 2 ounces minimum
Actuation Force, Tactile — 16 ounces nominal
Actuation Force, Silicone Rubber — 2 ounces minimum, depending on actuator design
Button Travel, Nontactile — .003" to .008"
Button Travel, Tactile — .015" to .025", depending on dome contact style
Button Travel, Silicone Rubber — .040" (typical)
Shock — 50 G. (3 hits on each axis)
Panel Thickness — Construction dependent

Environmental

Temperature Range — -40°C to +70°C
Humidity — Per MIL Std. 202E, Method 103B
Salt Fog — -5% solution for 48 hours

Advanced Quality Planning Sheet

Company: Date:
Address: Contact:
City/State: Phone: Type of Control Panel:
Estimated Annual Usage: ☐ Membrane ☐ Hybrid
Price Objective: ☐ Bonded Components ☐ Tactile Membrane
☐ Conductive Rubber

GRAPHIC SHEET

MATRIX

No. of Colors: Material: Thickness:
Texture: ☐ Matte ☐ Gloss ☐ Selective
Embossing: ☐ Rail ☐ Pillow ☐ Height
Display Windows: ☐ LCD ☐ LED ☐ Vacuum
POTENTIAL CHEMICAL EXPOSURE

ELECTRICAL SPECIFICATIONS

Contact Resistance (at termination): Max.
Operating Voltage: Operating Current:
Shielding Requirements: ☐ ESD ☐ RFI ☐ EMI
Switch Circuitry: ☐ Matrix ☐ SPST/COM ☐ Other
Max. Contact Bounce:

MECHANICAL SPECIFICATIONS

Life Requirements: Cycles Panel Size: X
Mounting Method: Flex Tail Length:
Critical Dimensions:
Termination at Tail: Contact Force:
Optional Components Required: Tactile Feedback:
☐ Backlighting ☐ LEDs
☐ Conductive Rubber ☐ Backer
☐ Molded Housing ☐ LCD
Dimensional Tolerances Required
Overall Size: +/-
Registration: +/-

ENVIRONMENTAL SPECIFICATIONS

Storage Temperature: Min. to Max. Humidity:
Operational Temperature: Min. to Max. Altitude:
User Environment:

PRODUCT QUALIFICATION

Environment Tests:

Qualification Process:

Molex Switch Products
2222 Wellington Court
Lisle, Illinois 60532
708-969-4550

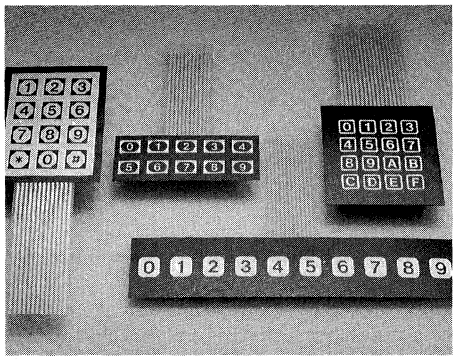
Molex recommends photocopying this form instead of removing page from catalog.

Standard Membrane Switches

Preferred in North and South America

10920/11920

- Sealed construction
- Momentary contacts
- Various circuit styles available
- Available with or without graphics
- Available with or without mounting adhesive
- May be trimmed to smaller configurations



Specifications

Electrical

Contact Rating: 28V dc, 30 mA
Life: 5,000,000 non-tactile, 1,000,000 tactile
Termination Resistance: 10-15 Ohms nominal, 100 Ohms maximum
Contact Bounce: less than 10 milliseconds
Switch Capacitance: less than 20 picofarads

Mechanical

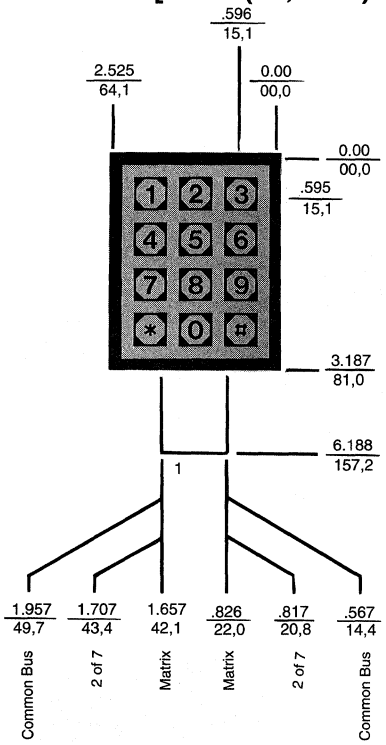
Actuation Force: 2-8 ounces typical, non-tactile; 16 ounces nominal,tactile
Button Travel: .003"-.008" typical, non-tactile; up to.025" typical, tactile
Thickness: .018"-.055" typical
Stock: 50 G. (3 hits on each axis)

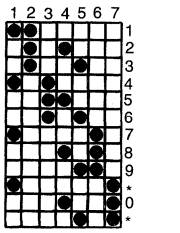
Environmental

Temperature Range: -40°C to +70°C
Humidity: per MIL Std. 202E, Method 103B
Salt Fog: 5% solution for 48 hours

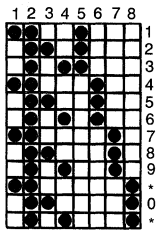
Conductive traces are printed on opposite side of tail with respect to switches as shown.

10920-3-XXX
11920-3-XXX
[.666" (16,9mm) Centers]

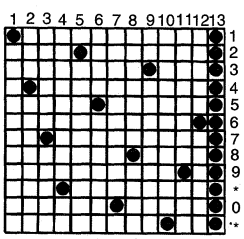




3 x 4
Matrix

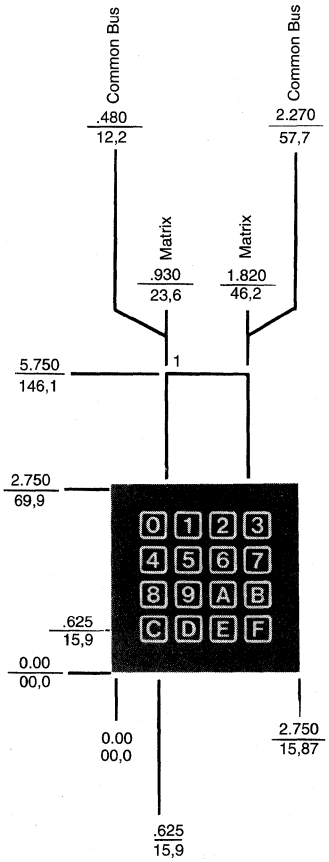


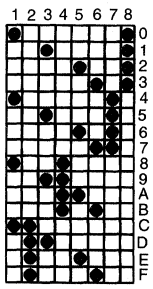
3 x 4
2 of 7



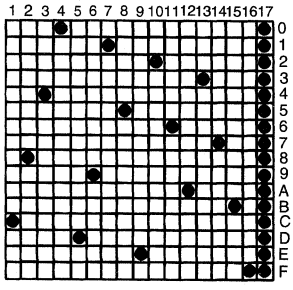
3 x 4
Common bus

10920-4-XXX
[.500" (12,7mm) Centers]





4 x 4
Matrix



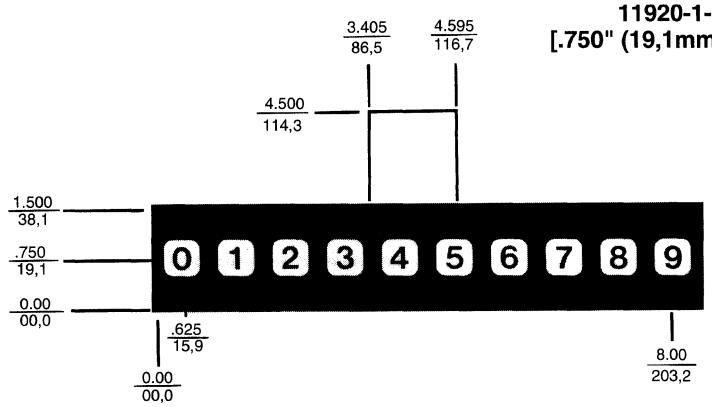
4 x 4
Common bus

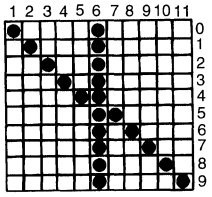
S

Standard Membrane Switches

Preferred in North and South America

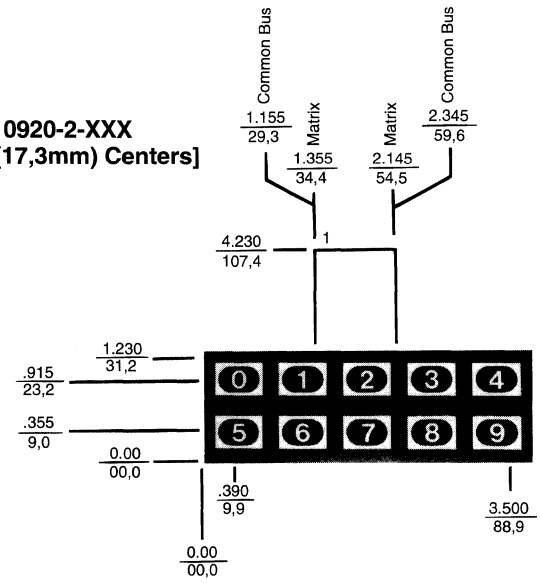
10920-1-XXX
11920-1-XXX
[.750" (19,1mm) Centers]

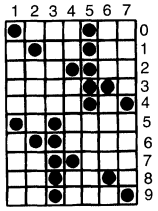




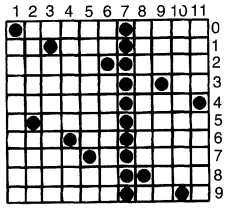
1 x 10

10920-2-XXX
[.680" (17,3mm) Centers]



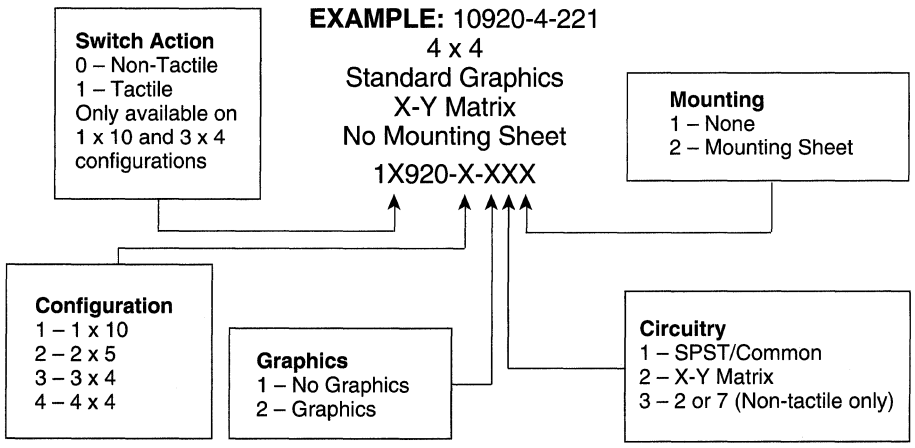


2 x 5
Matrix



2 x 5
Commom bus

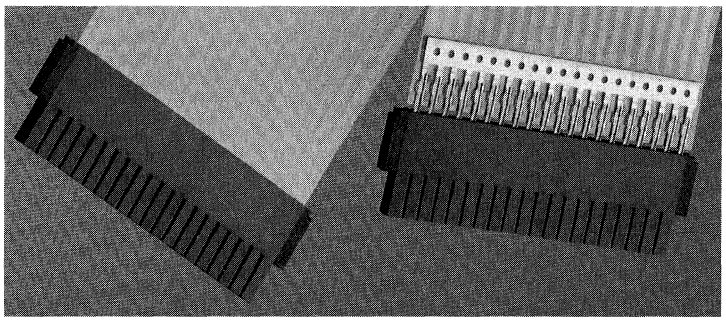
ORDERING INFORMATION for Standard Switches



Molex Connectors For Flexible Control Panels

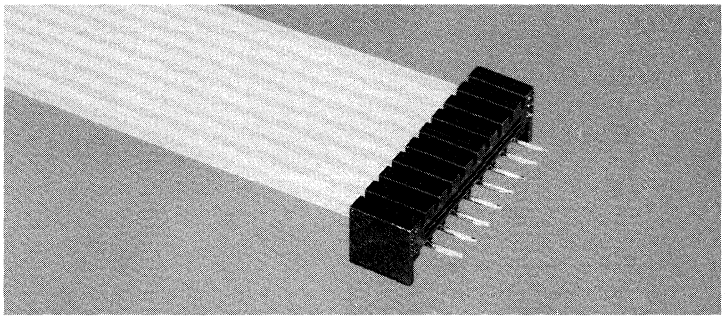
40556

- 4-27 circuits
- Industry compatible
- Phosphor bronze box terminal
- Mass termination
- 94V-0 polyester housing



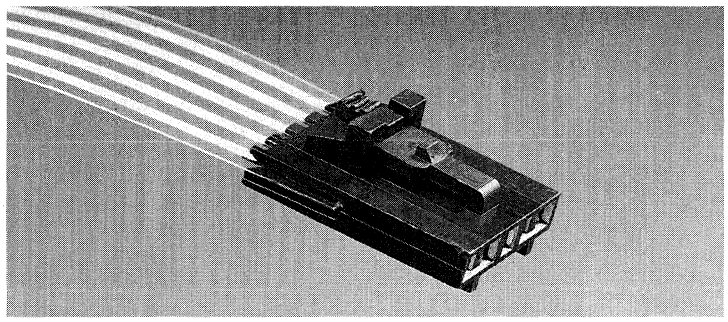
5229

- 3-27 circuits
- Low insertion force
- Low profile
- Pre-tinned phosphor bronze contacts
- 94V-0 glass filled polyester housing



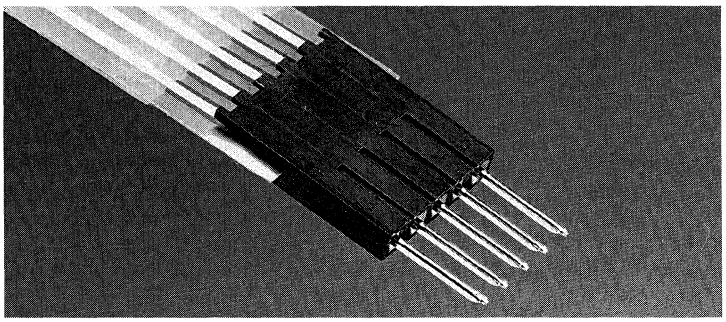
70430

- 2-25 circuits
- Industry compatible
- Polarizing options available
- Locking options available
- 94V-0 polyester



70431

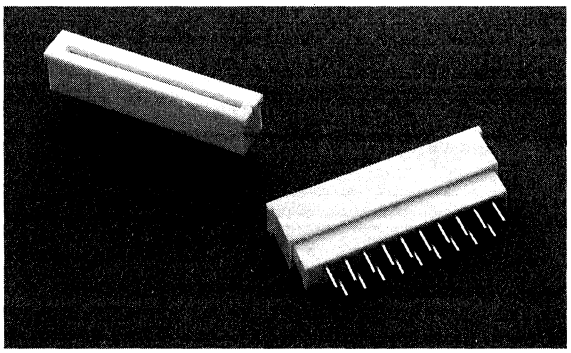
- Male pins
- 2-25 circuits
- Industry compatible
- Polarizing options available
- Locking options available
- 94V-0 polyester

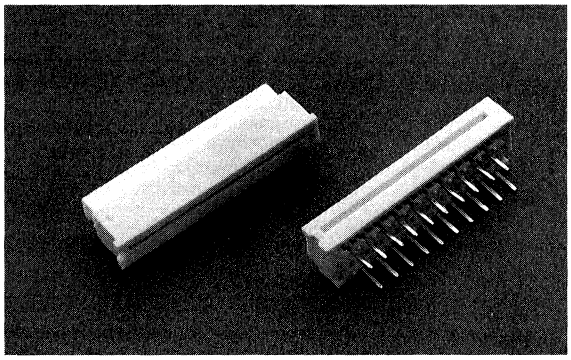


Molex Connectors For Flexible Control Panels

5597/5598

- 3-30 circuits
- Zero insertion force
- Straight or right angle P.C. tails
- 94V-0 polyester housing
- Tin plated phosphor bronze contacts





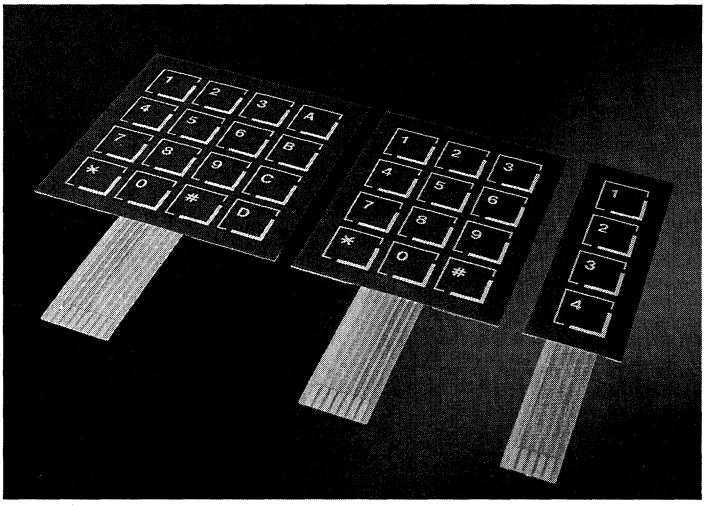
Standard Membrane Switches

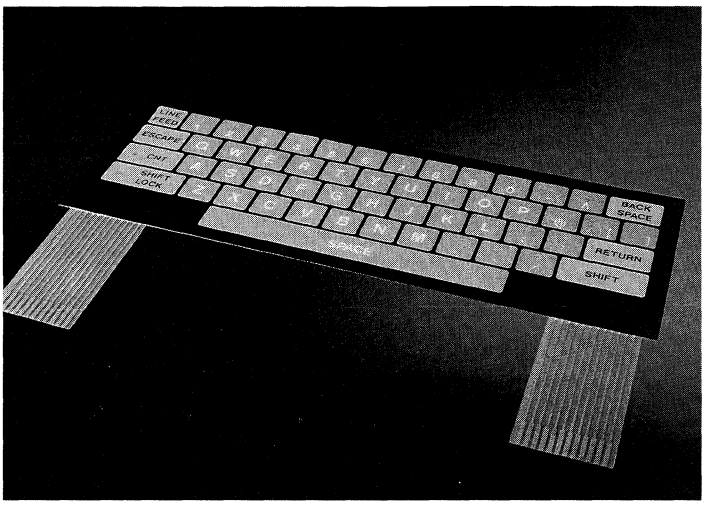
Preferred in Europe

The three-colored front face can be flat or embossed and there is a choice of two surfaces, matte or glossy.

The carrier layer consists of stabilized polyester, and the contacts and connections are implemented with a part-silver conductive ink that is applied by silk screening.

The adhesive layer on the rear permits immediate attachment.





Specifications

Electrical

Switched Power:
0.005 mW min.
10 mW max.

Voltage:
10 mV min.
50 V max.

Current:
500 mA min.
100 mA max.

Operating Conditions:
5V 20 mA

Loop Resistance:
100 Ohms typical

Insulation Resistance:
100 M Ohms min. at 100V dc

Withstanding Voltage:
500 V eff. typical

Life Test:
Frequence 1 Hz, number of actuations 5.10^6

Contact Bounce:
<5 ms typical

Contact Capacitance:
1V/1kHz : <40pF typical

Environmental

Operating Temperature:
-25°C to +70°C

Storage Temperature:
-40°C to +70°C

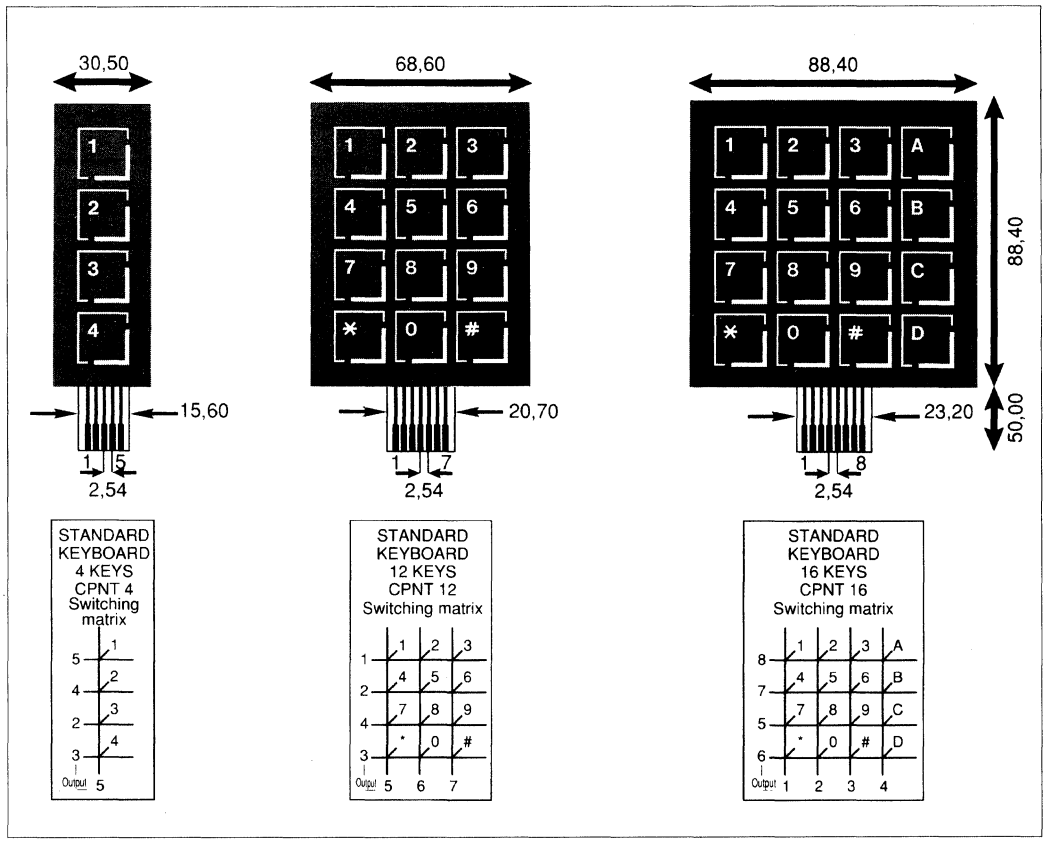
Salt Spray:
Insulation resistance >100 M Ohms for 48 hours

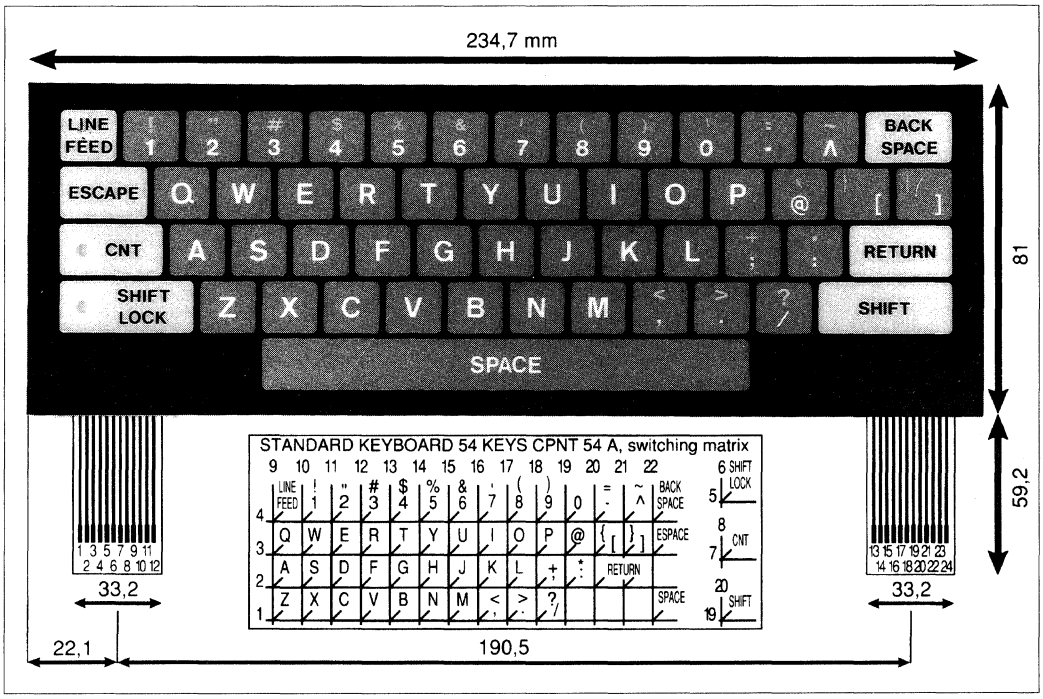
Damp Heat:
Insulation resistance >100 M Ohms at +40°C, 93% B.H., for 10 days

Standard Membrane Switches

molex®

Preferred in Europe





Ordering Information

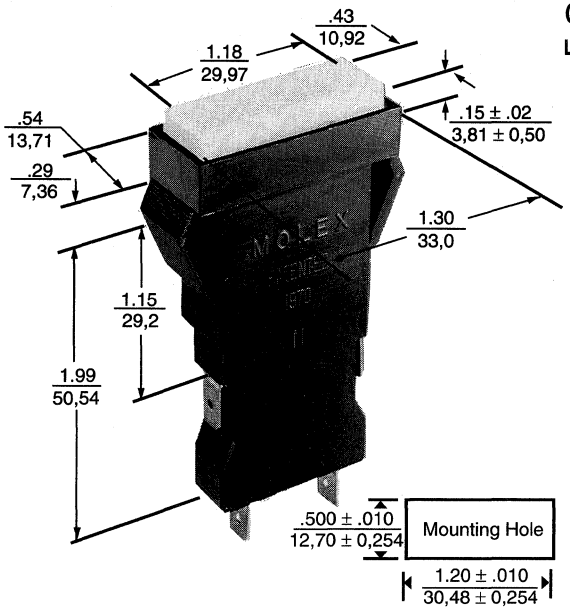
Complete Order No. by adding the code for each option.

Description		Front face glossy = B1 Matte = B2	
CPNT	XX	XX	XX
	Number of keys 04, 12, 16 or 54		Formed = G1 Flat = G2

1820 RL

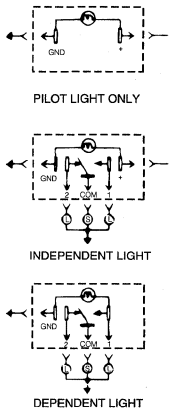
Lighted Pushbutton Switches

- ☐ Replaceable lamps
- ☐ SPST & SPDT
- ☐ 2, 6 & 9 amps
- ☐ UL and CSA listed
- ☐ 7 button colors
- ☐ Hot stamping
- ☐ 25,000 cycles
- ☐ Stacking versatility
- ☐ Dependent or independent lamp circuitry



CIRCUIT DIAGRAMS

LEGEND
L-Load
S-Power Source
GND-Ground (Negative)
COM-Common
+-Positive



1820

- ☐ Same as 1820 RL but without replacement lamp
- ☐ Neon lamp with internal dropping resistor

Ordering Information 1820RL or 1820

Complete the numerical description by placing the three-digit identification for *each* option in proper sequence.

1820RL or 1820 - XXX - XXX - XXX - XXX - XXX

Stamping (Specify legend)
600 No hot stamp
604 Style I (vertical button,vertical legend) long
605 Style II (horizontal button, horizontal legend) long
606 Style III (vertical button, horizontal legend) long
699 Non-standard legend (specify)

Action (125 VAC)
120 Pilot only - no switch
121 2 amp alternate action, SPST
122 2 amp alternate action, SPDT
123 2 amp momentary, normally open
124 2 amp momentary, normally closed
125 2 amp momentary, SPDT
126 6 amp alternate action SPST
127 6 amp alternate action SPDT
128 6 amp momentary, normally open*
129 6 amp momentary, normally closed*
130 6 amp momentary SPDT*
131 9 amp alternate action, SPST
132 9 amp alternate action, SPDT
133 9 amp momentary, normally open SPST
134 9 amp momentary, normally closed SPST
135 9 amp momentary, SPDT
*Not UL or CSA listed

Bezel
514 Black nylon (long) 1820
515 White nylon (long) 1820
516 Black nylon 1820RL
517 White nylon 1820RL
599 Non-standard Bezel (specify)

Button 1820
414 White long button
415 Red long button
416 Amber long button
417 Blue long button
418 Black long button
419 Green long button
420 Yellow long button
499 Non-standard color (specify)

Button 1820 RL

428 White	**432** Black
429 Red	**433** Green
430 Amber	**434** Yellow
431 Blue	**499** Non-standard color (specify)

Bulb 1820 RL
331 28V independent
332 14V independent
333 12V independent
334 6V independent
335 28V dependent
336 14V dependent
337 12V dependent
338 6V dependent
339 Non-standard bulb

Bulb 1820 only
300 No bulb - switch only
301 125V independent
302 250V independent (4.5 amps)
321 28V independent
322 14V independent
323 12V independent
324 6V independent
325 125V dependent
326 250V dependent (4.5 amps)
327 28V dependent
328 14V dependent
329 12V dependent
330 6V dependent

1820 RL/1820 Technical Specifications

Mechanical:

Switch Action:

Alternate action: Push on-Push off SPST
Alternate action: Push on-Push off SPDT
Momentary normally open SPST
Momentary normally closed SPST
Momentary SPDT
☐ Pilot light without switch
☐ Switch without light

Buttons:

White, red, amber, blue, black, green, or yellow (For 125 or 250 VAC Neon Bulb applications - green, blue, and black buttons are not recommended.)

Hot Stamping of Buttons:

Words, letters, numbers and symbols can be hot stamped. Red, blue, green and black buttons are stamped in white. Amber, yellow and white buttons are stamped in black.

Standard Lettering:

.120 inches high having .030 inches between lines.

Bezels:

Black or white nylon is standard.

Materials:

Housing molded from UL listed nylon with maximum usage temperature 65°C. Switch movements are precision copper alloy stamping. Silver contacts are provided for 4.5, 6 and 9-amp usage.

Mounting:

Integrally molded snap-lock ears provide positive lock in panels of .085 (for 1820) and .120 (1820RL) inches or less, and will friction fit in panels up to a maximum thickness of 1 inch. All switches are front entry. Positive locked switches can be released for front removal by compressing mounting ears from behind panel. Friction fits do not require compression of the mounting ears for removal.

Switch Leads

.02 x .19 x .30-inch spade terminals.

Style I
Two lines maximum.
Eight letters per line.





Style II
Two lines maximum.
Eleven letters per line.



Style III
Eight lines maximum.
Four letters per line.
Letters per line vary with optional type styles.

Electrical:

Underwriter Listings

Card Numbers		
Switch with or without pilot light	UL E33149	CSA 29661
Pilot light only	UL E40888	CSA 29653

Switch Rating

Amperes (AC)	2	4.5	6	9
Voltage (AC)	125	250*	125	125
Dielectric (Volts, RMS)	900	900	900	900
Amperes at 150% overload for 50 cycles	3	6.75	9	13.5
Type of test load			INDUCTIVE	
Power factor for test load			75-80%	
Endurance test at rated amperes			6000 cycles	

*For 250 VAC operation use 9 amp rated switch

Bulbs (Incandescent) 1820 RL only

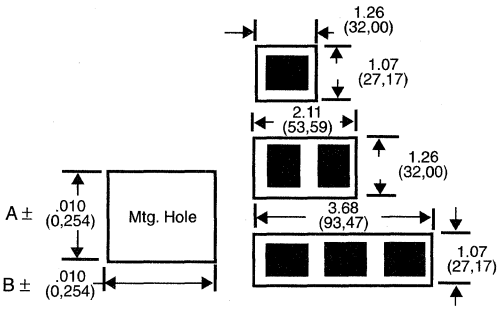
Volts	Mean Spherical Candle Power	Rated Avg. Lab Life Hrs.	Size	Amps	Commercial Designation
6.0	.40	50,000	1¾	.20	379
12.0	.50	6,000	1¾	.08	336
14.0	.30	10,000	1¾	.08	386
28.0	.30	7,000	1¾	.04	388

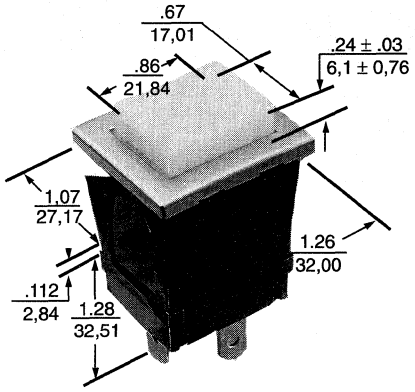
Bulbs 1820 Only

Type	Volts	Mean Spherical Candle Power	Rated Avg. Lab life hrs.	Size	Amps	Commercial Designation
Independent	6.3	.55	5,500	1¾	.20	2112
Dependent	6.3	.02	25,000	1¾	.04	2180
Independent and Dependent	12.0	.10	10,000	1¾	.04	2174
Dependent and Independent	14.0	.30	10,000	1¾	.08	2182
Dependent	28.0	.20	10,000	1¾	.04	2185
Independent	28.0	.30	7,000	1¾	.04	2187
Neon with 30KΩ series resistor	250.0	.02	25,000	NE2H	.002	ASA Type LT2-20
Neon with 100KΩ series resistor	125.0	.02	25,000	NE2H	.002	ASA Type LT2-20

1175 Lighted Pushbutton Switches

- ☐ SPST
- ☐ 2 or 8.5 amps
- ☐ UL & CSA rated
- ☐ 1, 2 or 3 switch configurations
- ☐ 7 button colors
- ☐ Hot stamping
- ☐ 25,000 cycles
- ☐ Incandescent or neon bulbs
- ☐ Lead wire option





Dimensional Information

Bezel	Dim. A	Dim. B	Bezel	Dim. A	Dim. B	Bezel	Dim. A	Dim. B
Single	.915 23,24	1.115 28,32	Double	1.115 28,32	1.955 49,65	Triple	.915 23,24	3.540 89,91

Technical Specifications 1175 & 2146

Electrical:

Underwriter Listings

Card Numbers		
Switch with or without pilot light	UL E33149	CSA 29661
Pilot light only	UL E40888	CSA 29653

Switch Rating

Amperes (AC)	2	4.25	8.5
Voltage (AC)	125	250	125
Dielectric (Volts, RMS)	900	900	900
Amperes at 150% overload for 50 cycles	3	6.4	12.8
Type of test load	INDUCTIVE		
Power factor for test load	75-80%		
Endurance test at rated amperes	6000 cycles		

*For 250 VAC operation use 8.5 amp rated system.

Bulbs

Type	Volts	Mean Spherical Candle Power	Rated Avg. Lab Life Hrs.	Size	Amps	Commercial Designation
Incandescent	6.0	.06	3,000	1¾	.06	2114
Incandescent	12.0	.10	10,000	1¾	.04	2174
Incandescent	14.0	.30	10,000	1¾	.08	2182
Incandescent	28.0	.20	10,000	1¾	.04	2185
Neon with 30KΩ series resistor	125.0	.02	25,000	NE2H	.002	ASA Type LT2-20
Neon with 100KΩ series resistor	250.0	.02	25,000	NE2H	.022	ASA Type LT2-20

All three clip types are front entry and front removable. "Snap-in" switches can be released for front removal by compression of the clips from behind panel. Pressure fits do not require clip compression for removal.

Mounting (2146 only):
Integrally molded mounting ears "Snap-in" panel thicknesses ranging from .031 to .125 inches, and will pressure fit in panels up to 1 inch in thickness. All switches are front entry. "Snap-in" switches can be released for front removal by compressing mounting ears from behind panel. Pressure fits do not require compression of the mounting ears for removal. (Technical specifications continued in center of next page.)

(1175 only)

Mounting Type	Panel Thickness
Standard clip - allows switch to be easily removed front of panel (pressure fit)	(912)* .031 (min.)
"Snap-in" mounting clip for positive panel locking	(910)* .031 to .109
"Snap-in" mounting clip for positive panel locking	(911)* .100 to .171

*Refer to Ordering Information

Ordering Information

Complete the numerical description by placing the three-digit identification for each option in proper sequence.

1175 or 2146 - XXX - XXX - XXX - XXX - XXX - XXX - XXX

Mounting (1175 only)
910 1175-8 **912** 1175-8A
911 1139-10

2146-1175
110-100 Pilot only - no switch
111-101 2 amp alternate action; Push on-push off SPST
112-102 2 amp momentary, normally open SPST
113-103 2 amp momentary, normally closed SPST
114-104 8½ amp alternate action; Push on-push off SPST
115-105 8½ amp momentary, normally open SPST
116-106 8½ amp momentary, normally closed SPST

Bulb (2146 and 1175)
300 No bulb -Switch only
301 125V neon
302 250V neon, 4.25 amps
303 28V incandescent
304 14V incandescent
305 12V incandescent
306 6V incandescent
399 Non-standard bulb (specify)

Button
400 White
401 Red
402 Amber
403 Blue
404 Black
405 Green
406 Yellow
499 Non-standard color(specify)

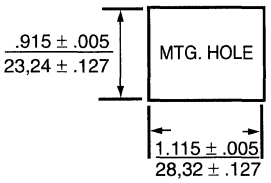
Bezel (2146 and 1175)
500 Chrome
501 Gold
502 Black oxide
503 Black enamel
506 Dual bezel - black oxide
507 Dual bezel - black enamel
508 Triple bezel - chrome
599 Non-standard bezel (specify)

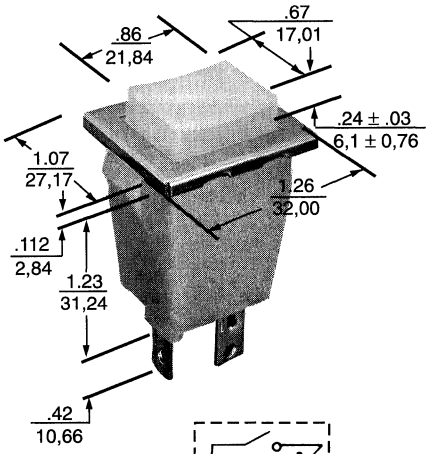
Bezel (1175 only)
504 Dual bezel - chrome
505 Dual bezel - gold

S

2146 Lighted Pushbutton Switch

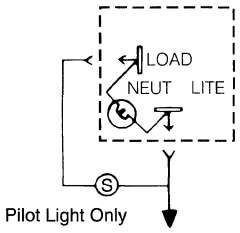
- ☐ SPST
- ☐ 2 or 8.5 amps
- ☐ UL & CSA rated
- ☐ Molded mounting ears
- ☐ 7 Button colors
- ☐ Hot stamping
- ☐ 25,000 Cycles
- ☐ Incandescent or neon bulbs
- ☐ Dust-free enclosure



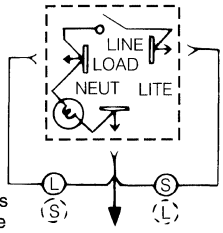


Circuit Diagrams
Models 1175 and 2146

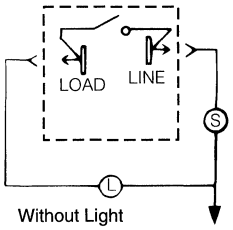
Legend:
S—Power Source
L—Load
NEUT—Neutral
LITE—Bulb



Pilot Light Only



Light Indicates Load is in Use



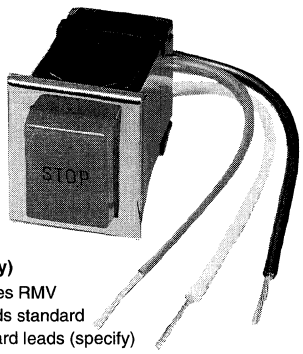
Without Light

Mechanical

Switch Action:
Alternate Action: Push on-push off SPST
Momentary normally open SPST
Momentary normally closed SPST
- ☐ Pilot light without switch
- ☐ Switch without light

Buttons:
Style- Standard buttons are of molded nylon. Hot stamping with standard or custom legends is available for both.

Color:
White, red, amber, yellow, blue, green, or black. (For 125 and 250 VAC neon bulb application - Green, blue and black buttons are not recommended.)



Leads (1175 only)
901 .250" spades RMV
902 6" wire leads standard
903 Non-standard leads (specify)

Stamping (Specify legend)	
2146-1175	
575-600	No hot stamp legend
576-607	Style I (vertical button-vertical legend)
577-608	Style II (horizontal button-horizontal legend)
578-609	Style III (vertical button-horizontal legend)
599-699	Non-standard legend (specify)

Hot Stamping of Buttons:
Words, letters, numbers and symbols can be hot stamped. Red, blue, green and black buttons are stamped in white. Amber, yellow and white buttons are stamped in black.



Style I
Four lines maximum. Five letters per line.



Style II
Three lines maximum. Eight letters per line.



Style III
Five lines maximum. Four letters per line.

Standard Lettering:
.120 letter height, .030 between lines. Letters per line will vary with optional type styles.

Bezels (1175 only):
Single and double metal bezels with chrome, gold, black oxide or black enamel finishes. Triple bezels available in chrome only.

Bezels (2146 only):
Single metal bezels with chrome, gold, black oxide or black enamel finishes.

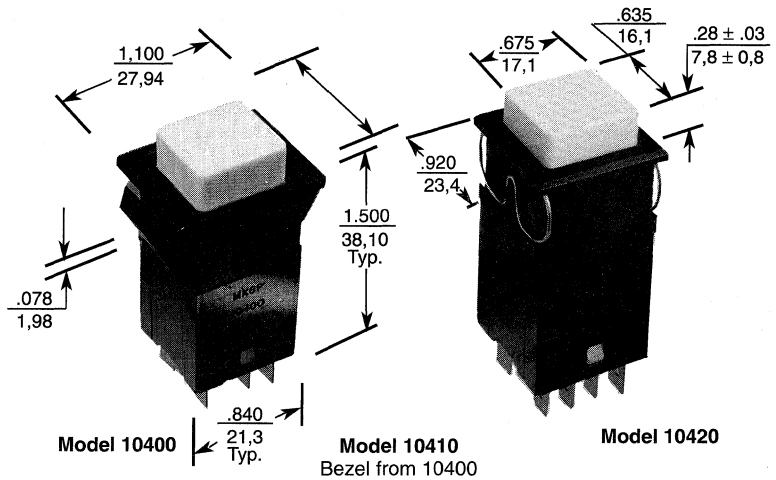
Materials (2146 only):
Housing molded from UL listed nylon rated with maximum usage temperature 65°C. Switch movements are precision copper alloy stampings. Silver contacts are provided for 4.25 and 8.5 amp usage.

Materials:
Housing molded from general purpose black phenolic rated with maximum usage temperature 105°C. Switch movements are precision copper alloy stampings, Silver contacts are provided for 4.25 and 8.5 amps usage.

Switch Leads:
Wire - 6-inch insulated length plus .50-inch stripped 18 AWG type PVC-105°C. (1175 only)
Spade terminal - .032 x .25 x .38 standard

10400/10410/10420
Lighted Pushbutton Switch

- SPST, SPDT, DPST 7 DPDT
- Momentary, alt. action, normally open/closed versions
- Replaceable lamp
- Front panel snap mounting
- Dead front button
- Wide selection of lenses, bezels and legends
- Contact ratings of 100 milliamps, 10.1 and 15 amps
- UL & CSA listed
- Dependent or independent lamp circuitry
- Neon lamp with internal dropping resistor
- Pilot light only



Model 10400 **Model 10410** **Model 10420**

Bezel from 10400
Mounting Clip from 10420

Ordering Data

Complete the numerical description by placing the three-digit identification for each option in proper sequence.

104 - XXX - XXX - XXX - XXX - XXX - X

Specify color of the hot stamp for the insert.
W - White **B** - Black

Hot Stamping Insert
Hot Stamping Button

610 - 600	No Hot Stamping
611 - 601	Style I
612 - 602	Style II
613 - 603	Style III
614 - 604	Style IV

00	Rectangular Bezel Molded Mounting Ears
10	Rectangular Bezel Wire Mounting Only
20	Square Bezel Wire Mounting Only

W White Bezel • **B** Black Bezel

100	SPST - 100MA/30VDC (Mom. N.O.)	**121**	DPST - 10.1A, 125/250 VAC (Mom. N.O.)
101	SPST - 100MA/30VDC (Mom. N.C.)	**122**	DPST - 10.1A, 125/250 VAC (Mom. N.C.)
102	SPST - 100MA/30VDC (P/P)	**123**	DPST - 10.1A, 125/250 VAC (Mom. N.C.-N.O.)
103	SPST - 10.1A, 125/250 VAC (Mom. N.O.)	**124**	DPST - 10.1A, 125/250 VAC (P/P)
104	SPST - 10.1A, 125/250 VAC (Mom. N.C.)	**126**	DPST - 10.1A, 125/250 VAC (P/P N.O.-N.C.)
105	SPST - 10.1A, 125/250 VAC (P/P)	**127**	DPST - 15 Amp/125 VAC (Mom N.O.)
106	SPST - 15 Amp/125 VAC (Mom. N.O.)	**128**	DPST - 15 Amp/125 VAC (Mom. N.C.)
107	SPST - 15 Amp/125VAC (Mom. N.C.)	**129**	DPST - 15 Amp/125 VAC (Mom. N.C.-N.O.)
108	SPST - 15 Amp/125 VAC (P/P)	**130**	DPST - 15 Amp/125 VAC (P/P)
109	SPDT - 100MA/30VDC (Mom.)	**132**	DPST - 15 Amp/125 VAC (P/P, N.C.-N.O.)
110	SPDT - 100MA/30VDC (P/P)	**133**	DPDT - 100MA/30VDC (Mom.)
111	SPDT - 10.1A, 125/250 VAC (Mom.)	**134**	DPDT - 100MA/30VDC (P/P)
112	SPDT - 10.1A, 125/250 VAC (P/P)	**135**	DPDT - 10.1A, 125/250 VAC (Mom.)
113	SPDT - 15 Amp/125 VAC (Mom.)	**136**	DPDT - 10.1A, 125/250 VAC (P/P)
114	SPDT - 15 Amp/125 VAC (P/P)	**137**	DPDT - 15 Amp/125 VAC (Mom.)
115	DPST - 100MA/30VDC (Mom. N.O.)	**138**	DPDT - 15 Amp/125 VAC (P/P)
116	DPST - 100MA/30VDC (Mom. N.C.)	**139**	SPECIAL
117	DPST - 100MA/30VDC (Mom. N.O.-N.C.)	**140**	Pilot Light
118	DPST - 100MA/30VDC (P/P)		
120	DPST - 100MA/30VDC (P/P N.O.-N.C.)		

Mom. Momentary

Button Color

411	White	**422**	Clear
412	Red	**423**	Green - Neon*
413	Orange	**424**	Red - Neon
414	Blue	**425**	Amber - Neon
415	Black	**426**	Dark Brown
416	Green	**427**	Clear Neon*
417	Yellow	**Dead Front with Smoke Button. Insert Color**	
418	Red - Neon*	**431**	White
419	Yellow - Neon*	**432**	Red
420	Amber - Neon*	**433**	Yellow
421	White - Neon		
*Button with Grid			

Bulb - Neon

300	No Bulb w/light term
301	125 V Independent
302	125 V Dependent
303	250 V Independent
304	250 V Dependent

Replaceable Lamp

305	6 V Independent
306	6 V Dependent
307	12 V Independent
308	12 V Dependent
309	14 V Independent
310	28 V Independent
311	28 V Dependent
312	SPECIAL
313	No Bulb, no light term.
314	14 V Dependent
399	Non-Standard (Specify)

Connectors

Two connectors are available to use with 10400 switch line.

10400/10410/10420
Technical Specifications

U.L. Card Number E33149

CSA Approval 29661

Electrical Ratings:

Wiping Action - Gold Contacts
Low Energy Switch

Switch Current - 100 mA
Voltage - 30 VDC
Operating Life - 75000 Min.
Contact Resistance - 10 mA initially
Dielectric Withstanding Voltage - 900 VAC

Snap Action - Silver Contacts
Power Duty Switch

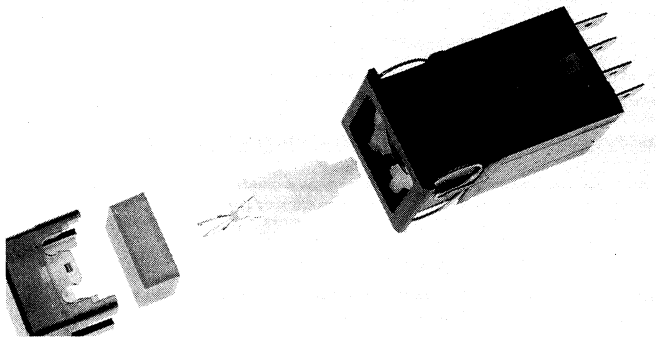
Switch Current - 10.1 Amp
Voltage (AC) - 125/250
Operating Life - 75000 Min.
Dielectric (Volts, RMS) - 900
Amperes at Overload
for 50 Cycles - 12.625
Type of Test Load - Inductive
Power Factor of Test Load - 75-80%
Endurance Test at Rated Amperes - 6,000 cycles

Snap Action - Silver Contacts
Heavy Duty Switch

Switch Current - 15 Amp
Voltage (AC) - 125/250
Operating Life - 50000 Min.
Dielectric (Volts, RMS) - 900
Amperes at Overload
for 50 Cycles - 18.75
Type of Test Load - Inductive
Power Factor of Test Load - 75-80%
Endurance Test at Rated Amperes - 6,000 cycles

INCANDESCENT					
Volts	Mean Spherical Candle Power	Rated Avg. Lab Life Hrs.	Size	Amps	Commercial Designation
6.3 Max.	.40	50,000	1¾	.20	2181
12.0 Max.	.12	10,000	1¾	.04	2174
14.0 Max.	.30	10,000	1¾	.08	2182
28.0 Max.	.30	10,000	1¾	.04	2187
NEON					
125 with 30KΩ RES	.02	25,000	NE2H	.002	ASA Type LT2-20
250 with 100KΩ RES	.02	25,000	NE2H	.002	ASA Type LT2-20

NOTE: Incandescent bulb is replaceable.
The neon lamp **is not** replaceable.



Hot Stamping of Buttons:

Words, letters, numbers and symbols can be hot stamped. Red, blue, green, smoke, brown and black buttons are stamped in white. Clear, amber, yellow and white buttons are stamped in black.

Hot Stamp Button Legend

Horizontal Legends
6 Letters Max.
Vertical Legends
5 Letters Max.
Standard Characters
MMI .100 High



Bezels:

Black or white nylon is standard. Optional colors are available on special order.

Materials:

Switch body and all plastic switch components are made from UL listed 94V-2 material with maximum usage temperature 65°C. Switch movements are precision beryllium copper with precious metal contacts.

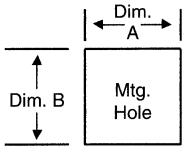
Mounting 10400:

Integrally molded snap—lock ears positive lock in panels .109 inches or less. All switches are front entry. Positive locked switches can be released for front removal by compressing mounting ears from behind panel.

Mounting to 10410 and 10420:

Wire forms to snap in panels .125 inches thick or less, and will friction fit in panels up to a maximum of 1 inch. All switches are front entry and front removal.

Switch Type	Dim.A	Dim. B	Panel Thickness
10400	1.030	.875	.030 to .109
10410	.875	.875	.030 to .125
10420	.875	.875	.030 to .125

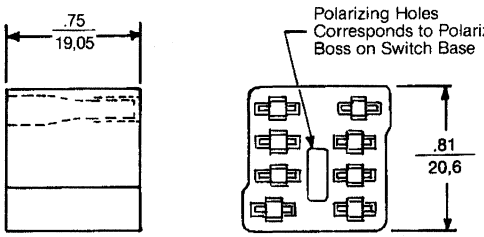


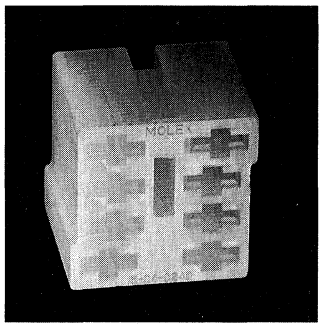
Switch Leads

.02 x .19 x .30-inch spade terminals. (10.1 Amp and Low Energy Switch)

.032 x .25 x .40-inch spade for 15 Amp.

6376
Connector for 10400 Switch Series



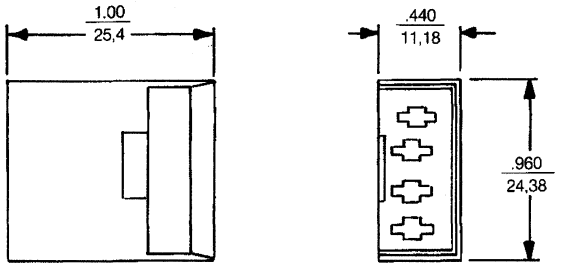


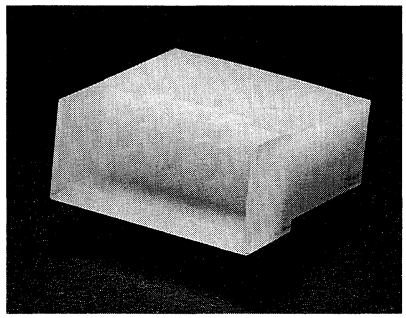
Circuits	Order No.	Electrical	
		Max. Amps	Max. Volts
8	15-04-0240	10.1	250

Uses 2176, 2328, 2576, 2698, and 2799 terminals.

6376 Connector can be used with low energy and 10.1 amp switches.

10402-063
Connector for 10400 Switch Series



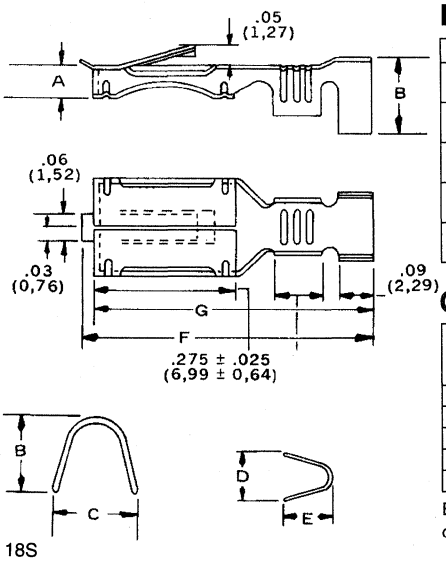


Circuits	Order No.	Electrical per Circuit	
		Max. Amps	Max. Volts
4	06-06-3063	10.1	250

Uses 2176, 2328, 2576, 2698, and 2799 terminals.

10402-063 Connector can be used with SPST or SPDT dependent incandescent lamp switches low energy or 10.1 amp

2176, 2328, 2576, 2698, and 2799 terminals can be used with above connectors.



Dimensions

Eng. No.	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G
2176	.074 1,88	.187 4,75	.210 ± .035 5,33 ± 0,09	.120 ± .025 3,05 ± 0,64	.13 3,3	.625 15,88	.610 ± .015 15,49 ± 0,38
2328	.074 1,88	.156 3,96	.165 ± .030 4,19 ± 0,76	.120 ± .025 3,05 ± 0,64	.13 3,3	.640 16,26	.620 15,75
2576	.080 2,03	.156 3,96	.210 ± .035 5,33 ± 0,09	.120 ± .025 3,05 ± 0,64	.13 3,3	.625 15,88	.610 ± .015 15,49 ± 0,38
2698	.080 2,03	.156 3,96	.165 ± .030 4,19 ± 0,76	.120 ± .025 3,05 ± 0,64	.13 3,3	.625 15,88	.610 ± .015 15,49 ± 0,38
2799	.080 2,03	.090 2,29	.100 2,54	.085 2,16	.07 1,8	.620 15,75	.610 ± .015 15,49 ± 0,38

Ordering Information

Crimp Wire Size	Insulation Diameter	Material Thickness	Eng. No.	Chain Form Order No.		Loose Form Order No.	
				W/Detent	W/O Detent	W/Detent	W/O Detent
14-22	.085 - .135	.010	2176	05-06-0301	05-06-0303	05-06-0302	05-06-0304
14-22	.085 - .125	.010	2328	05-06-0401	05-06-0402	05-06-0403	05-06-0404
14-22	.085 - .135	.012	2576	—	05-06-0305	—	05-06-0306
14-22	.085 - .125	.012	2698	—	05-06-0405	—	05-06-0406
24-28	.034 - .060	.012	2799	—	05-06-0307	—	05-06-0308

Eng. No./Reel Quantities: 1943 and 2799/6,000; 2328/4,000, 2176 and 2698/3,000; and 2576/2,500. All chain form orders rounded to the nearest full reel. All terminals are brass alloy, tin plated.

Wire Gauge Classifications*

AWG	DIAMETER		AREA		
	In.	mm	Circular Mils	In²	mm²
10 (1)	.1019	2.59	10384	.00816	5.27
10 (37/26)	.1113	2.83	9361	.00736	4.75
12 (1)	.0808	2.05	6528	.00513	3.31
12 (19/25)	.0895	2.27	6088	.00479	3.09
12 (37/28)	.0882	2.24	5883	.00463	2.88
14 (1)	.0641	1.63	4109	.00323	2.08
14 (19/27)	.071	1.80	3831	.00300	1.94
16 (1)	.0508	1.29	2581	.00203	1.31
16 (19/29)	.0557	1.41	2426	.00190	1.23
18 (1)	.0403	1.02	1620	.00128	.823
18 (19/30)	.050	1.27	1900	.00149	.963
20 (1)	.032	.813	1020	.000804	.519
20 (7/28)	.0378	.960	1113	.000875	.563
20 (19/32)	.040	1.02	1216	.000956	.616
22 (1)	.0253	.643	640	.000503	.324
22 (7/30)	.030	.762	700	.000550	.355
22 (19/34)	.0315	.800	754	.000593	.382
24 (1)	.0201	.511	404	.000317	.205
24 (7/32)	.024	.609	448	.000352	.227
24 (19/36)	.025	.635	475	.000372	.241
26 (1)	.0159	.404	253	.000199	.128
26 (7/34)	.0189	.480	278	.000218	.141
26 (19/38)	.020	.510	304	.000239	.154
28 (1)	.0126	.320	159	.000125	.0804
28 (7/36)	.015	.381	175	.000137	.0889
28 (19/40)	.0155	.395	183	.000143	.0925
30 (1)	.0100	.254	100	.0000785	.0507
30 (7/38)	.012	.306	112	.0000882	.0568
30 (19/42)	.0125	.320	119	.0000933	.0600
32 (1)	.0080	.203	64.0	.0000503	.0324
32 (7/40)	.0093	.237	67.3	.0000529	.0341
32 (19/44)	.010	.255	76.0	.0000597	.0386
34 (1)	.0063	.160	39.7	.0000312	.0201
34 (7/42)	.0075	.192	43.8	.0000344	.0222
36 (1)	.0050	.127	25.0	.0000196	.0127
36 (7/44)	.006	.153	28.0	.0000220	.0142
38 (1)	.0040	.102	16.0	.0000126	.00811
40 (1)	.0031	.079	9.61	.00000755	.00487
42 (1)	.0025	.064	6.25	.00000491	.00317
44 (1)	.0020	.051	4.00	.00000314	.00203

***Classifications of insulated round copper conductors.**

Molex U.S. Franchised Distributor Network

Corporate Headquarters — 2222 Wellington Court, Lisle, Illinois 60532 U.S.A. — Phone 708-969-4550 FAX 708-969-1352

U.S.A.

ALABAMA

Gateway Megatech
Madison, AL 35758
205-464-9300

Hamilton Avnet
Huntsville, AL 35805
205-837-7210

Time Electronics
Huntsville, AL 35816
800-258-8513

ARIZONA

Force Electronics
Phoenix, AZ 85040
602-437-1060

Hamilton Avnet
Tempe, AZ 85281
602-961-1211

Sterling Electronics
Phoenix, AZ 85040
602-437-5565

Time Electronics
Tempe, AZ 85282
602-731-6752

T.T.I.
Tempe, AZ 85282
602-861-0222 (Phoenix)
602-431-1191 (Tempe)
800-225-5884

ARKANSAS

Carlton Bates
Ft. Smith, AR 72901
501-646-8201

Little Rock, AR 72209
501-562-9100

Pine Bluff, AR 71601
501-535-1354

Springdale, AR 72764
501-756-5012

CALIFORNIA

Force Electronics
El Segundo, CA 90245
213-772-1324/714-522-1324
800-421-5880

San Diego, CA 92123
619-569-9661

Santa Clara, CA 95054
408-748-1324

Hamilton Avnet
Costa Mesa, CA 92626
714-641-4100

Gardena, CA 90248
213-217-6888

Roseville, CA 95661
916-925-2216 (Sunnyvale)

San Diego, CA 92123
619-571-1900

Sunnyvale, CA 94089
408-743-3300

Woodland Hills, CA 91367
818-594-0404

Integrated Electronics Corp.
Irvine, CA 92718
714-753-0127

Sacramento, CA 95827
916-363-6030

Kent Electronics
Santa Clara, CA 95050
408-727-9810

Torrance, CA 90501
310-320-2700

Peters-de Laet
S. San Francisco, CA 94080
415-873-9595/ 800-DO-MOLEX

Richey Impact Electronics, Inc.
Garden Grove, CA 92641
714-895-0060/800-227-0060

San Diego, CA 92121
619-271-4511

San Jose, CA 95132
408-956-8010

Sterling Electronics
Chatsworth, CA 91311
818-407-8850

San Diego, CA 92123
619-560-8097

San Jose, CA 95131
408-435-0835

Tustin, CA 92680
714-259-0900

Time Electronics
Woodland Hills, CA 91367
818-888-5155

San Diego, CA 92127
619-674-2800

Sunnyvale, CA 94089
408-734-9890

Tustin, CA 92680
800-531-4987

T.T.I.
Mission Hills, CA 91345
818-891-8885/800-225-5884

Milpitas, CA 95035
408-946-5577/800-225-5884

Santa Anna, CA 92705
714-641-9393/800-225-5884

San Diego, CA 92128
619-748-2025/800-225-5884

COLORADO

Bell Industries
Denver, CO 80222
303-691-9270

Hamilton Avnet
Englewood, CO 80112
303-799-7800

Integrated Electronics
Denver, CO 80216
303-292-6121

Sterling Electronics
Englewood, CO 80112
303-792-3939

Time Electronics
Englewood, CO 80111
800-847-3780

T.T.I.
Westminster, CO 80030
303-429-6806/800-225-5884

CONNECTICUT

Hamilton Avnet
Danbury, CT 06810
203-743-6077

Heilind Electronics
Southbury, CT 06488
203-262-1700

Sager Electrical Supply Co. Inc.
Wallingford, CT 06492
203-265-4600

Sterling Electronics
Wallingford, CT 06492
203-265-9535

Time Electronics
Southbury, CT 06488
203-262-1319

T.T.I.
Wallingford, CT 06492
203-284-7474/800-225-5884

FLORIDA

Hamilton Avnet
Ft. Lauderdale, FL 33309
305-767-6377

St. Petersburg, FL 33716
813-573-3930

Winter Park, FL 32792
407-657-3300

Lodan Electronics
Largo, FL 34641
813-586-2851

Sager Electrical Supply Co, Inc.
Orlando, FL 32819
407-354-1130

Time Electronics
Ft. Lauderdale, FL 32811
800-258-8513

Orlando, FL 32811
800-258-8513

T.T.I.
Orlando, FL 32809
407-859-1000

GEORGIA

Gateway Megatech
Roswell, GA 30076
404-642-8787

Hamilton Avnet
Duluth, GA 30136
404-446-0611 (Georgia)
800-241-6928 (E. Tennessee)

Time Electronics
Norcross, GA 30071
800-258-8513

T.T.I.
Norcross, GA 30071
404-662-0911

IDAHO

Radar Electric
Boise, ID 83709
208-336-2227

ILLINOIS

Hamilton Avnet
Bensenville, IL 60106
708-860-7700

Integrated Electronics Corp.
Hoffman Estates, IL 60195
708-843-2040

Sterling Electronics
Schaumburg, IL 60173
708-303-9900

Sub-Sem, Inc.
Crystal Lake, IL 60014
815-459-4139

Time Electronics
Schaumburg, IL 60195
708-303-3000

T.T.I.
Schaumburg, IL 60173
708-884-6500

Waldom Electronics, Inc.
Chicago, IL 60629
312-585-1212

INDIANA

Gateway Megatech
Indianapolis, IN 46224
317-298-0111
800-MEGATEK

Hamilton Avnet
Carmel, IN 46032
317-844-9333

T.T.I.
Indianapolis, IN 46260
800-225-5884

IOWA

Hamilton Avnet
Cedar Rapids, IA 52402
319-393-7050

KANSAS

Hamilton Avnet
Lenexa, KS 66219
913- 888-8900

Sterling Electronics
Lenexa, KS 66215
913-492-5406

KENTUCKY

Hamilton Avnet
Lexington, KY 40511
606-259-1475

LOUISIANA

Carlton Bates
Shreveport, LA 71109
318-636-9975

Sterling Electronics
Westego, LA 70094
504-436-1418

MARYLAND

Hamilton Avnet
Columbia, MD 21046
301-995-3500 (Baltimore)
301-621-8410 (Washington)

Sterling Electronics
Columbia, MD 21046
410-290-3800

Time Electronics
Columbia, MD 21045
800-622-3090

T.T.I.
Columbia, MD 21045
301-621-5335

MASSACHUSETTS

Hamilton Avnet
Peabody, MA 01960
508-531-7430

Heilind Electronics
Wilmington, MA 01887
508-657-4870

Richey Impact Electronics, Inc.
Walpole, MA 02081
508-668-8200

Sager Electrical Supply Co., Inc.
Hingham, MA 02043
617-749-6700

Sterling Electronics
Woburn, MA 01801
617-938-6200

Time Electronics
Peabody, MA 01960
800-241-6260

T.T.I
Tewksbury, MA 01876
508-851-2000

MICHIGAN

Empire Electronics
Troy, MI 48083
313-585-8130

Gateway Megatech
Ann Arbor, MI 48105
313-761-2980
800-MEGATEK

Holland, MI 49423
616-335-2968
800-MEGATEK

Hamilton Avnet
Grand Rapids, MI 49508
616-243-8805

T.T.I.
Novi, MI 48050
800-225-5884

MINNESOTA

Hamilton Avnet
Minnetonka, MN 55343
612-932-0600

Sterling Electronics
Minneapolis, MN 55435
612-831-2666

Time Electronics
Minnetonka, MN 55345
800-541-8399

T.T.I.
Minnetonka, MN 55343
612-933-8555

MISSOURI

Hamilton Avnet
Chesterfield, MO 63005
314-537-1600

Lectronix
Earth City, MO 63045
314-344-1166
800-325-3348

Time Electronics
Manchester, MO 63011
314-230-7500

NEW HAMPSHIRE

Sager Electrical Supply Co., Inc.
Salem, NH 03079
603-898-1348

Molex U.S. Franchised Distributor Network

Corporate Headquarters — 2222 Wellington Court, Lisle, Illinois 60532 U.S.A. — Phone 708-969-4550 FAX 708-969-1352

U.S.A. *(continued)*

NEW JERSEY

EAC/JMAR Corporation
Teterboro, NJ 07608
201-288-4477
800-422-8837

Hamilton Avnet
Cherry Hill, NJ 08003
609-424-0100

Parsippany, NJ 07054
201-575-3390

Sterling Electronics
Edison, NJ 08837
908-417-1000

Time Electronics
Marlton, NJ 08053
800-458-4635

Wayne, NJ 07470
800-458-4635

T.T.I.
Mount Laurel, NJ 08054
609-234-6400

NEW MEXICO

Hamilton Avnet
Albuquerque, NM 87109
505-345-0001

Sterling Electronics
Albuquerque, NM 87107
505-884-1900

NEW YORK

Hamilton Avnet
Hauppauge, NY 11788
516-231-9800

North Syracuse, NY 13212
315-437-2641

Rochester, NY 14623
716-292-0730

Help/Heilind Electronics
Johnson City, NY 13790
607-729-3528

Sager Electrical Supply Co., Inc
Hauppauge, NY 11788
516-348-1300

Time Electronics
East Syracuse, NY 13057
800-241-6260

Hauppauge, NY 11788
516-273-0100

T.T.I.
Ronkonkoma, NY 11779
516-737-2000/800-225-5884

NORTH CAROLINA

Hamilton Avnet
Raleigh, NC 27604
919-878-0810

Sager Electrical Supply Co., Inc.
Raleigh, NC 27604
919-850-9550

OHIO

Gateway Megatech
Columbus, OH 43202
614-447-0222
800-MEGATEK

Dayton, OH 45429
513-298-6342
800-MEGATEK

Willoughby, OH 44094
216-953-0333
800-MEGATEK

Hamilton Avnet
Columbus, OH 43231
614-882-7004

Dayton, OH 45459
513-439-6700

Solon, OH 44139
216-349-5100
216-242-6610 (Toledo)

Sterling Electronics
Solon, OH 44139
216-248-1122

Time Electronics
Columbus, OH 43231
708-303-3000

T.T.I.
Cleveland, OH 44130
216-328-9755
800-CALL-TTI

Dayton, OH 45414
513-898-8330
800-CALL-TTI

OKLAHOMA

Carlton Bates
Oklahoma City, OK 73108
405-691-4446

Tulsa, OK 74146
918-250-1626

Hamilton Avnet
Tulsa, OK 74146
918-250-8763

Sterling Electronics
Tulsa, OK 74146
918-663-2410

OREGON

Hamilton Avnet
Beaverton, OR 97005
503-627-0201

Integrated Electronics Corp.
Beaverton, OR 97005
503-641-1690

Kent Electronics
Beaverton, OR 97005
503-626-8300

Radar Electric
Portland, OR 97214
503-232-3404

Time Electronics
Portland, OR 97005
503-626-2979

T.T.I.
Beaverton, OR 97005
800-CALL-TTI

PENNSYLVANIA

Advacom
Export, PA 15632
412-325-7551

McKean, PA 16426
814-476-7774

Gateway Megatech
Pittsburgh, PA 15206
412-361-2710
800-MEGATEK

Hamilton Avnet
Mars, PA 16046
412-281-4150
814-455-6767 (Erie)

Sager Electrical Supply Co., Inc.
Mars, PA 16046
412-772-2233

Philadelphia, PA 19154
215-464-4336

PUERTO RICO

Hamilton Avnet
Rio Piedras, PR 00926
809-731-1110

TENNESSEE

Carlton Bates
Jackson, TN 38305
901-664-2714

Memphis, TN 38118
901-365-3539

Nashville, TN 37210
615-885-3232

TEXAS

Carlton Bates
Austin, TX 78758
512-837-9098

Ft. Worth, TX 76140
817-293-5558

Houston, TX 77092
713-956-2244

Texarkana, TX 75501
903-792-6923

Force Electronics
Dallas, TX 75234
214-247-9955

Austin, TX 78758
512-476-2104

Houston, TX 77099
713-561-8644

Hamilton Avnet
Austin, TX 78758
512-837-8911

Dallas, TX 75244
214-308-8111

Houston, TX 77008
713-240-7733

Kent Electronics
Austin, TX 78758-4031
512-834-1900

Houston, TX 77036
713-780-7770

Richardson, TX 75081-2437
214-669-2600

Sterling Electronics
Austin, TX 78758
512-836-1341

Carrollton, TX 75006
214-243-1600

Houston, TX 77027
713-627-9800

Time Electronics
Austin, TX 78759
800-538-8562

Richardson, TX 75081
800-538-8562

T.T.I
Ft. Worth, TX 76118
817-595-3100

Houston, TX 77099
713-879-5800

UTAH

Bell Industries
Midvale, UT 84047
801-255-9611

Hamilton Avnet
Salt Lake City, UT 84121
801-263-0104

Integrated Electronics
Salt Lake City, UT 84119
801-977-9750

Sterling Electronics
Salt Lake City, UT 84119
801-972-5444

Time Electronics
W. Valley City, UT 84119
800-847-3780

T.T.I.
Salt Lake City, UT 84119
800-CALL-TTI

VIRGINIA

Gateway Megatech
Richmond, VA 23229
804-740-6895
800-MEGATEK

Sterling Electronics
Richmond, VA 23231
804-226-2190

WASHINGTON

Hamilton Avnet
Oak Harbor, WA 98277
206-679-5576

Redmond, WA 98052
206-241-8555/800-562-7834

Integrated Electronics Corp.
Bellevue, WA 98005
206-455-2727

Kent Electronics
Redmond, WA 98052
206-883-7200

Radar Electric
Richland, WA 99352
509-943-8336

Seattle, WA 98119
206-282-2511

Spokane, WA 99202
509-747-3053

Time Electronics
Kirkland, WA 98034
206-820-1525

T.T.I.
Redmond, WA 98052
206-882-0291

WISCONSIN

Hamilton Avnet
Waukesha, WI 53186
414-784-4510

Marsh Electronics
Milwaukee, WI 53214
414-475-6000

Sub-Sem, Inc.
New Berlin, WI 53151
800-435-6130

Molex Canadian Franchised Distributor Network

Corporate Headquarters — 2222 Wellington Court, Lisle, Illinois 60532 U.S.A. — Phone 708-969-4550 FAX 708-969-1352

Canada

Central & Eastern Canada

MONTREAL

Future Electronics
Pointe Clair, Quebec H9R5C7
514-694-7710

Hamilton Avnet
St. Laurent, P.W. H4S 1P8
514-335-1000

SVI
Pointe Clair, Quebec H9R 452
514-630-7470

Zentronics
St. Laurent, P.Q. H4T 1N1
514-737-9700

OTTAWA

Future Electronics
Ottawa, Ontario K2C 3P2
613-820-8313

Hamilton Avnet
Nepean, Ontario K2E 7J5
613-226-1700

SVI
Nepean, Ontario K2H 9C4
613-726-0587

Zentronics
Nepean, Ontario K2E 7K3
613-226-8840

TORONTO

Future Electronics
Mississauga, Ontario L4V IW5
416-612-9200

Hamilton Avnet
Mississauga, Ontario L4V 1R2
416-677-7432

SVI
Don Mills, Ontario M3B 2R4
416-445-2340

Zentronics
Mississauga, Ontario L5R 3S5
416-507-2600

Nova Scotia

Arcom Electronics LTD
Dartmouth, Nova Scotia B3B 1K4
902-464-1600

Western Canada

BRITISH COLUMBIA

Future Electronics
Vancouver, B.C. V5K 4X7
604-294-1166

Hamilton Avnet
Burnaby, B.C. V5A-4N6
604-420-4101

Queale Electronics
Victoria B.C. V8T-2X3
604-388-6111

Zentronics
Richmond, B.C. V6X-1T2
604-273-5575

CALGARY, ALBERTA

Cardinal Industrial Elec.
Calgary, Alberta T2H 2M4
403-259-6817

Future Electronics
Calgary, Alberta TIY 6B5
403-250-5550

Zentronics
Calgary, Alta. T2E 7S8
403-291-1988

EDMONTON

Cardinal Industrial Elec.
Edmonton, Alta.
403-483-6266

Future Electronics
Edmonton, Alberta T6E 5N9
403-438-2858

Zentronics
Edmonton, Alta. T5S 1G3
403-484-1669

SASKATOON, SASK

Cardinal Industrial Elec.
Saskatoon, Sask. S7L 6H8
306-934-3443

WINNIPEG, MANITOBA

Future Electronics
Winnipeg, Manitoba R3H 0N8
204-786-7711

WES Electronics
Winnipeg, Manitoba R3H 0R8
204-632-1260

Molex Offices U.S.A.

Corporate Headquarters — 2222 Wellington Court, Lisle, Illinois 60532 U.S.A. — Phone 708-969-4550 FAX 708-969-1352

NORTHWEST REGION
194 South Hillview Drive
Milpitas, CA 95035
Phone (408) 946-4700
FAX (408) 946-5386

SOUTHWEST REGION
641 North Poplar Street
Orange, CA 92668
Phone (714) 937-9380
FAX (714) 978-9106

Molex Industrial Interfaces
641 North Poplar Street
Orange, CA 92668
Phone (714) 937-9393
FAX (714) 978-9107

Ulti Mate Inc.
641 North Poplar Street
Orange, CA 92668
Phone (714) 937-9388
Fax (714) 978-9352

MIDWEST REGION
2222 Wellington Court
Lisle, IL 60532
Phone (708) 969-4550
FAX (708) 512-8622

CENTRAL REGION
11350 N. Meridian, Suite #300
Carmel, IN 46032
Phone (317) 571-3877
FAX (317) 571-3866

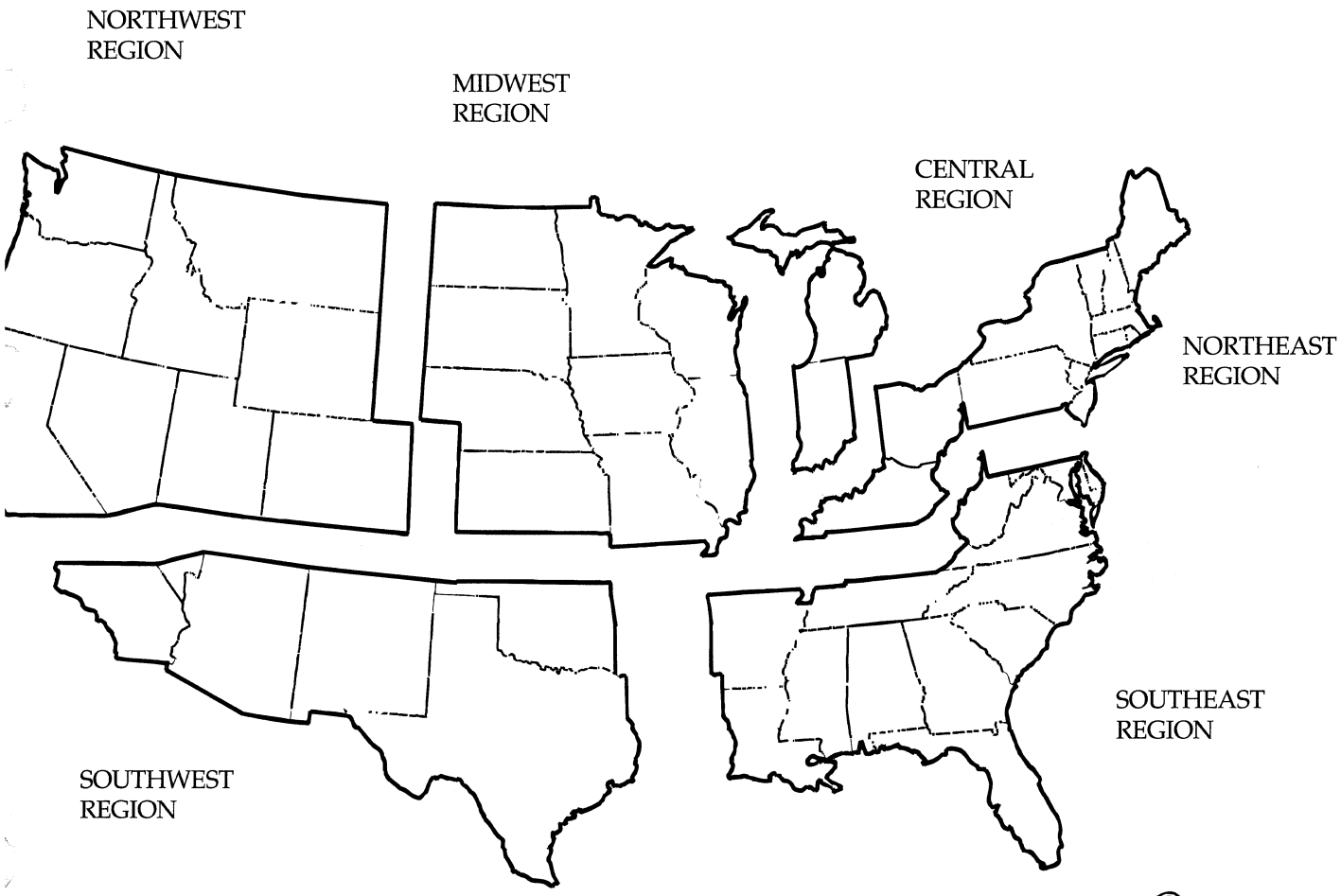
District Office serving
Automotive Customers
1607 East Big Beaver Road, Suite 101
Troy, MI 48083
Phone (313) 528-0011
FAX (313) 528-3887

Molex Fiber Optic
Interconnect Technologies
2111 Oxford Road
Des Plaines, IL 60018
Phone (708) 803-3600
FAX (708) 803-3608

NORTHEAST REGION
600 West Cummings Park, #6900
Woburn, MA 01801
Phone (617) 935-8983
FAX (617) 932-3857

SOUTHEAST REGION
9755 Dogwood Road, Suite 111
Roswell, GA 30075
Phone (404) 992-3715
FAX (404) 992-0152

Molex-ETC, Inc.
4650-62nd Avenue North
Pinellas Park, FL 34665
Phone (813) 521-2700
FAX (813) 528-1010



In Puerto Rico call (809) 848-5044

Molex International

UNITED STATES - Molex Incorporated, International Division 2222 Wellington Court, Lisle, Illinois 60532 U.S.A. *Phone:* 708-969-4550 *Telex:* 27-4069 *Telefax:* 708-969-1352
EUROPEAN HEADQUARTERS - Molex Services GmbH, Dingolfingerstr. 4, D-81673 Munich, Germany *Phone:* 49-89-413092-0 *Telex:* (841) 5214425 *Telefax:* 49-89-401527
NORTHERN ASIA HEADQUARTERS - Molex Far East Mgmt. Ltd., 4-21-1 Minami-Naruse, Machida, Tokyo, 196 Japan *Phone:* 427-21-5539 *Fax:* 427-21-5562
SOUTHEAST ASIA HEADQUARTERS - Molex Far East Mtgmt. Ltd., 110 International Road, Jurong Town, 2262 Singapore *Phone:* 268-6868 *Telefax:* 265-6044

ARGENTINA
Reycom Electronica S.R.L.
Uruguay 362 Piso 8 Depto F.
1015 Buenos Aires
Argentina
Phone: 54-1-11-1722
Fax: 54-1-11-1721

AUSTRALIA
Utilux Pty. Ltd.
14 Commercial Road
Kingsgrove N.S.W. 2208
Australia
Phone: 61-2-500155
Fax: 61-2-5021753

BRAZIL
Molex Eletronica Ltda.
Rua Capitao Francisco Teixeira
Nogueria #232 Bairro Agua Branca
05038 - Sao Paulo - SP - Brazil
Phone: 55-11-263-7399
Fax: 55-11-263-3625
Telex: 391-1183188

Molex da Amazonia
Avenida Cupiuba 476
Distrito Industrial
Manaus, Amazonas, Brazil
Phone: 55-92-615-1213
Fax: 55-92-615-2536
Telex: 391-0922828

BULGARIA
Mr. Vitan Pandev
P.O. Box 112
CMPLX Trakia 16A AP31
4023 Plovdiv
Bulgaria
Phone: 32-86-21-56
Fax: 32-86-21-56

CANADA
Molex Electronics Ltd.
85 Select Ave.
Scarborough, Ontario
Canada M1V 4A9
Phone: 416-292-1444
Fax: 416-292-2922

CHINA
Molex China
Room 1344, Garden Office Tower
Guangzhou, China
Phone: 86-20-338999
Fax: 86-20-355779

Dongguan Molex South-China Connector Co., Ltd.
Weixin Road, Xinwei Village
Shilong Town, Dongguan
Guangdong Province
China
Phone: 86-7620-611376
Fax: 86-7620-612716

CZECH REPUBLIC
VLK
P.O. Box 67
Druzstevni 434
763-15 Slusovice
Czech Republic
Phone: 42-6-79-81-419
Fax: 42-6-79-81-419

DENMARK
Hans Folsgaard A/S
Ejby Industrivej 2
2600 Glostrup, Denmark
Phone: 45-43-963388
Fax: 45-43-968855
Telex: 855-33505

EGYPT
High Technology Systems Ltd.
28 Mohyeldin Abouelezz Street
P.O. Box 59 Mohandessin
12655 Cairo, Egypt
Phone: 20-2-3491051
Fax: 20-2-3486278

FINLAND
Intotel Oy
Lammittajankatu 4
00810 Helsinki, Finland
Phone: 358-0-755-7711
Fax: 358-0-755-3581

FRANCE
Molex France SARL
4 Boulevard Arago
91320 Wissous, France
Phone: 33-1-69814900
Fax: 33-1-69206703

Molex Switch
Z.I. de Bellitourne
53200 Chateau-Gontier, France
Phone: 33-43-073980
Fax: 33-43-703601

Molex Eastern Europe
52, Avenue Des Champs Elysees
75008 Paris, France
Phone: 33-1-4075-0189
Fax: 33-1-4075-0303

GERMANY
Molex Services GmbH
Dingolfinger Strasse 4
81673 Munich, Germany
Phone: 49-89-413092-0
Fax: 49-89-401527
Telex: 841-17724324

Molex Elektronik GmbH
Automotive Plant
Einstein Strasse 18
76275 Ettlingen, Germany
Phone: 49-7243-335-0
Fax: 49-7243-31420

Molex GmbH
Otto-Hahn Strasse 8
74078 Heilbronn-Biberach
Germany
Phone: 49-7066-30-0
Fax: 49-7066-3026

HONG KONG
Molex Nanco Ltd. - Shatin Plant
2/F Blk A, Shatin Ind. Center
5-7 Yuen Shun Circuit
Siu Lek Yuen, Shatin, N.T. H.K.
Phone: 852-637-3111
Fax: 852-637-5990
Telex: 780-51251

HUNGARY
C + F Kft.
Angyalfoldi ut 38
1134 Budapest
Hungary
Phone: 36-140-8476
Fax: 36-140-8456

INDIA
Jalex Connector Systems Ltd.
Plot No. 6 (A)
Kadugodi Industrial Area
Sadaramangala
Whitefield
Bangalore - 560 067
India
Phone: 91-812-452911
Fax: 91-812-452922

IRELAND
Molex S.A.
Site, 3 Shannon Industrial Estates
Shannon Free Airport
Shannon, Ireland
Phone: 353-61-61566
Fax: 353-61-61908

ISRAEL
Telsys Ltd.
Atidim, Bldg. 3 Dvora Hanevia Str.
Neve Sharet
Tel Aviv 61431, Israel
Phone: 972-03-492001
Fax: 972-03-497407
Telex: 922-371279

ITALY
Molex Italia SPA
Via Milano 8/11
20068 Peschiera Borromeo
Italy
Phone: 39-2-553-01408
Fax: 39-2-553-01405

Zetronic SPA
IX Strada, 27
35129 Padova
Italy
Phone: 39-49-807-2071
Fax: 39-49-807-2548

JAPAN
Molex Japan Co., Ltd.
4-21-1, Minami-Naruse
Machida, Tokyo, 196
Japan
Phone: 81-427-21-5511
Fax: 81-427-21-5564

Molex Far East North
4-21-1, Minami-Naruse
Machida, Tokyo, 196
Japan
Phone: 81-427-21-5539
Fax: 81-427-21-5562

KOREA
Molex Korea Sales Office
Room 1111, Chang Kang Bldg.
Dohwa-Dong, Mapo-Gu
Seoul, Korea
Phone: 82-2-702-6342-4
Fax: 82-2-702-6364

Molex Korea Co., Ltd.
726-3 Wonsi-Dong
Ansan City, Kyunggi-Do
Republic of Korea
Phone: 82-345-492-9000
Fax: 82-345-492-0888
Telex: 787-22597

Molex Korea Co., Ltd.
No. 306 Daegu Bank Bldg.
206-1, Kongdan-Dong, Gumi City
Kyungbuk, Republic of Korea
Phone: 82-546-54-8911
Fax: 82-546-461-8912

MALAYSIA
Molex Malaysia Sdn Bhd
2607 Jalan Perusahaan
Kawasan Perindustrian Pari
13700 Prai, Penang, Malaysia
Phone: 60-4-398134
Fax: 60-4-398140
Telex: 784-40265

MEXICO
Molex De Mexico, S.A. DE C.V.
Av. De La Productividad #305
Parque Industrial Guadalajara
Las Pintas, Jalisco, Mexico
Phone: 52-36-89-14-33
Fax: 52-36-89-00-29

NETHERLANDS
Molex (Benelux) B.V.
De Run 4547
5503 LT Veldhoven
The Netherlands
Phone: 31-40-543-535
Fax: 31-40-544-665

NEW ZEALAND
Utilux Limited
24 Ashfield Street
Glenfield, Aukland
New Zealand
Phone: 64-9-444-7161
Fax: 64-9-444-8857

NORWAY
Molex G. Knutsen As.
Trondheimsveien 80
Post Boks 6598 Rodeloekka
0501 Oslo 5, Norway
Phone: 47-22-384-330
Fax: 47-22-373-717

PHILIPPINES
Molex Philippines
Unit 704 Windsor Tower
163 Legazpi St.
Legazpi Village
Makati, Metro
Manila Philippines
Phone: 63-90-201-4185
Fax: 63-2-815-3198

POLAND
JP International
Vl. Grojecka 42M38
02-320 Warszawa
Poland
Phone: 48-22-220-233
Fax: 48-22-220-233

ROMANIA
EDCG
P.O. Box 15-224
27, Bd. Eroilor Sanitari
76250 BUCHAREST 15 Sect 5
Romania
Phone: 401-613-21-98
Fax: 401-312-31-22

RUSSIA
Cabix Consulting
Shosse Entuziastov, 5
111112 MOSCOW
Phone: 7-362-01-73
Fax: 7-95-36-287-63
Telex: 417-706

SINGAPORE
Molex Singapore Pte. Ltd.
110 International Road
Jurong Town
2262 Singapore
Phone: 65-268-6868
Fax: 65-265-6044

Molex Far East South
110 International Road
Jurong Town
2262 Singapore
Phone: 65-268-6868
Fax: 65-265-6044

SLOVAK REPUBLIC
Kontex
Domove Role 74
821 05 Bratislava
Slovak Republic
Phone: 42-7-24-75-29
Fax: 42-7-24-75-29

SLOVENIA
Madocom d.o.o.
Klopciceva 2
61117 Ljubljana
Slovenia
Phone: 38-61-572-452
Fax: 38-61-572-452

SOUTH AFRICA
Technor Pty. Limited
775 Pretoria Main Road
Wynberg, Sandton, South Africa
Phone: 27-11-887-1227
Fax: 27-11-440-6213

SPAIN
Molex Espana
Buenaventura Munoz 13
08018 Barcelona, Spain
Phone: 34-3-300-3414
Fax: 34-3-300-7659

SWEDEN
Molex Svenska AB
Travgatan 88, Box 707
194 27 Upplands Vasby, Sweden
Phone: 46-8-590-930-40
Fax: 46-8-590-882-50

SWITZERLAND
EM EGLI AG Zurich
Bauteile Und Steuersysteme
Lohwisstrasse 52,
8123 Ebmatingen
Switzerland
Phone: 41-1-9801111
Fax: 41-1-9800869

TAIWAN
Molex Taiwan Ltd.
100-3 Shia-Kwei-Rou-Shan
Tamshui, Taipei Hsien
Taiwan R. O. C.
Phone: 886-2-620-2300
Fax: 886-2-622-3124

Molex Taiwan Ltd. -RF Division
100-3 Shia-Kwei-Rou-Shan
Tamshui, Taipei Shien
Taiwan R. O. C.
Phone: 886-2-620-2300
Fax: 886-2-622-3124

THAILAND
Molex Thailand Ltd.
No. 71/4 Moo 5 Bangpakong Ind. Pk
Bangna-Trad Rd. KM 52,
Tambol Takar
Bangpakong, Chachoengsao 24130
Thailand
Phone: 66-38-513020
Fax: 66-38-513023

TURKEY
Spektrum Elektronik
Sarrafali Sk. 36/10
Saracoglu Han Kadikoy
Istanbul, 81300 Turkey
Phone: 90-1-347-2286
Fax: 90-1-336-8566

U.K.
Molex Electronics Ltd. (U.K.)
Molex House, Farnham Road,
Bordon Hampshire GU35 0NU
England
Phone: 44-420-477070
Fax: 44-420-478185



Bringing People & Technology Together, Worldwide℠

CORPORATE HEADQUARTERS
International Division
Molex Incorporated
2222 Wellington Court, Lisle
Illinois 60532 U.S.A.
Phone: 1 (708) 969 4550
Fax: 1 (708) 969 1352

EUROPEAN HEADQUARTERS
Molex Services GmbH
Dingolfinger Str. 4
81673 München
Germany
Phone: 49 (89) 41 30 92-0
Fax: 49 (89) 40 15 27

NORTHERN ASIA HEADQUARTERS
Molex Far East North
4-21-1 Minami-Naruse, Machida
Tokyo 196, Japan
Phone: 81 (427) 21 55 39
Fax: 81 (427) 21 55 62

SOUTHERN ASIA HEADQUARTERS
Molex Far East South Mgmt. Ltd.
110, International Road Jurong Town
2262 Singapore
Phone: (65) 268 6868
Fax: (65) 265 6044